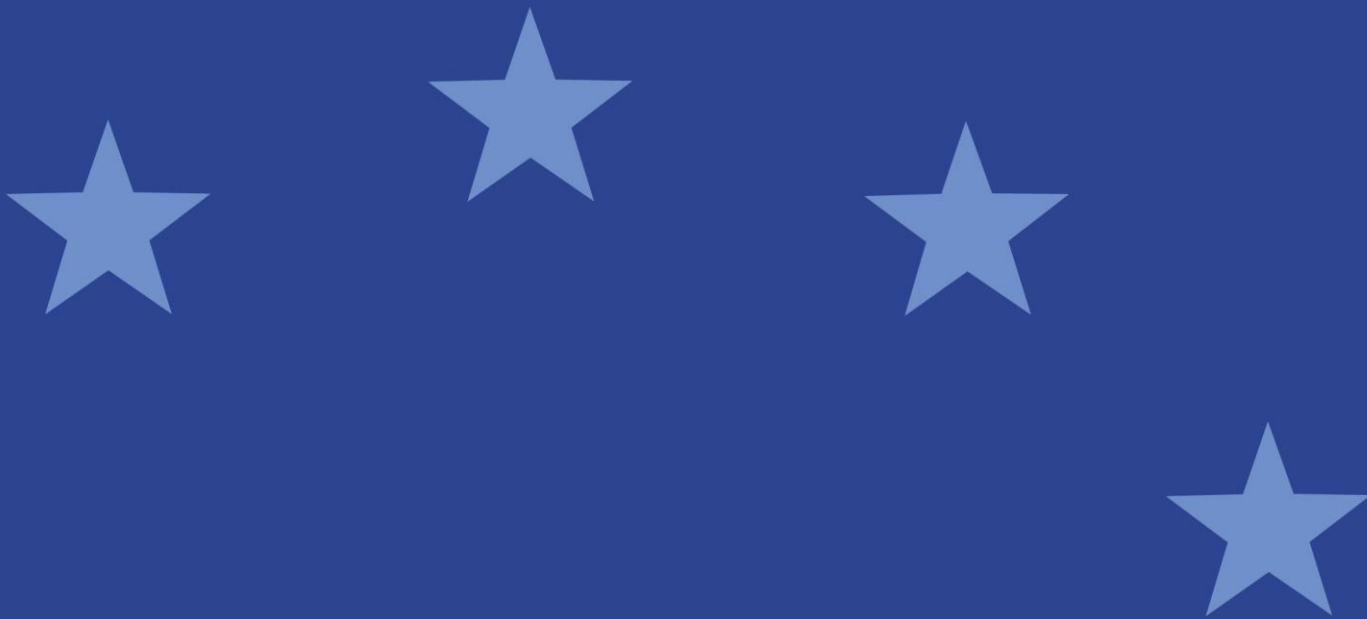




European Securities and
Markets Authority

Addendum Consultation Paper

MiFID II/MiFIR



Responding to this paper

The European Securities and Markets Authority (ESMA) invites responses to the specific questions listed in this Consultation Paper.

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

In order to respond to this paper, please follow the instructions given in the document 'Reply form for the Addendum Consultation Paper on MiFID II/MiFIR' also published on the ESMA website.

ESMA will consider all comments received by 20 March 2015.

Publication of responses

All contributions received will be published following the close of the consultation period, unless otherwise requested. Please clearly and prominently indicate in your submission any part you do not wish to be publically disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from ESMA in accordance with ESMA's rules on access to documents. ESMA may consult respondents if ESMA receives such a request. Any decision we make not to disclose the response is reviewable by ESMA's Board of Appeal and the European Ombudsman.

Data protection

Information on data protection can be found at www.esma.europa.eu under the headings 'Legal Notice' and 'Data protection'.

Who should read this paper?

This document will be of interest to all stakeholders involved in the securities markets. It is primarily of interest to competent authorities and firms that are subject to MiFID II and MiFIR – in particular, investment firms and credit institutions performing investment services and activities. This paper is also important for trade associations and industry bodies, institutional and retail investors and their advisers, and consumer groups, as well as any market participant because the MiFID II and MiFIR requirements seek to implement enhanced provisions to ensure investor protection and the transparency and orderly running of financial markets with potential impacts for anyone engaged in the dealing with or processing of financial instruments.

Table of Contents

1. Introduction	13
2. Transparency	15
2.1. Foreign exchange derivatives.....	15
Liquid market definition	15
Pre-trade and Post-trade transparency requirements for non-equity instruments.....	168
Annex 2.1.1: Details on the cleansing of TRs data for foreign exchange derivatives	210
Annex 2.1.2: Alternative B - LIS and SSTI thresholds for the classes of NDF and spread betting.....	212
2.2. Credit derivatives	231
Liquid market definition	231
Pre-trade and Post-trade transparency requirements for non-equity instruments.....	253
Annex 2.2.1: Details on the cleansing of TRs data for credit derivatives	272
2.3. Other derivatives	274
Liquid market definition	274
Pre-trade and Post-trade transparency requirements for non-equity instruments.....	280
Annex 2.3.1: Details on the cleansing of TRs data for other derivatives	294
Annex 2.3.2: Alternative B - LIS and SSTI thresholds	296
2.4. Contracts for difference	297
Liquid market definition	297
Pre-trade and Post-trade transparency requirements for non-equity instruments.....	310
Annex 2.4.1: Details on the cleansing of data for CFDs	320
3. RTS 9: Draft regulatory technical standards on transparency requirements in respect of bonds, structured finance products, emission allowances and derivatives.....	322
Annex I: Information to be made public in accordance with article 2	325
Annex II: Details of transaction to be made available to the public.....	325
Annex III: Liquidity assessment, LIS and SSTI thresholds for non-equity financial instruments.....	327

Acronyms and definitions used

ABCP	Asset-backed commercial paper
ABS	Asset-backed security
ADR	Alternative dispute resolution
ADT	Average daily turnover
AIFMD	Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers (AIFMs)
A-IOI	Actionable indications of interest
AMP	Accepted market practice
AOR	Automated order routing
APA	Approved publication arrangement
AVT	Average value of transactions
BIC	Business Identifier Code. An 11-character alpha-numerical code that uniquely identifies a financial or non-financial institution. It is defined by ISO code 9362
BIS	Bank for International Settlements
CBO	Collateralised bond obligation
CDO	Collateralised debt obligation
CDS	Credit default swap
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CESR	Committee of European Securities Regulators
CCP	Central counterparty

CFD	Contract for difference
CFI	Classification of Financial Instruments
CFTC	U.S. Commodities Futures Trading Commission
Class+	Class of OTC derivatives subject to the clearing obligation
CLO	Collateralised loan obligation
CMBS	Commercial mortgage backed security
COFIA	Classes of financial instrument approach
Coreper	The Permanent Representatives Committee or Coreper (Article 240 of the Treaty on the Functioning of the European Union – TFEU)
Commission	European Commission
CP	Consultation Paper
CRD IV	Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC
CRR	Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012
CSD	Central securities depository
CDS	Credit Default Swap
CSF	Cash settled forward
CT	Consolidated tape
CTP	Consolidated tape provider
DA	Delegated act to be adopted by the European Commission

DEA	Direct electronic access
DP	Discussion Paper
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pension Authority
EMIR	European Market Infrastructures Regulation – Regulation (EU) 648/2012 of the European Parliament and Council on OTC derivatives, central counterparties and trade repositories – also referred to as “the Regulation”
EOD	End of the day
ESMA	European Securities and Markets Authority
ESMA Regulation	Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC
ETD	Exchange-traded derivative
ETF	Exchange-traded fund
EU	European Union
FC	Financial counterparty
FCD	Financial Collateral Directive – Directive 2002/47/EC of the European Parliament and the Council.
FESCO	Forum of European Securities Commissions
FINRA	Financial Industry Regulatory Authority

FRA	Forward rate agreement
FSB	Financial Stability Board
FX	Foreign exchange
HFT	High frequency trading
ISIN	International Securities Identification Number: a 12-character alpha-numerical code that uniquely identifies a security. It is defined by ISO code 6166
IBIA	Instrument by instrument approach
IOI	Indication of interest
IOSCO	International Organisation of Securities Commissions
IPO	Initial public offering
IRS	Interest rate swap
ISO	International Organization for Standardization
ITS	Implementing Technical Standards
KID	Key information document
KIID	Key investor information document
LEI	Legal entity identifier
LIS	Large in scale
LRIC	Long-run incremental cost
MAD	Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse
MAR	Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation).

MiFID or MiFID I	Markets in Financial Instruments Directive – Directive 2004/39/EC of the European Parliament and the Council
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU
MiFIR	Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 648/2012
MO	Market operator
MMF	Money market fund
MS	Member State
MTF	Multilateral trading facility
MTN	Medium-term note
NCA	National Competent Authority
NDF	Non deliverable forward
NTW	Negotiated trade waiver
NFC	Non-financial counterparty
OIS	Overnight index swap
OJ	The Official Journal of the European Union
OTC	Over-the-counter
OTF	Organised trading facility
PRIIPs	Packaged retail and insurance-based investment products
Q&A	Questions and Answers
RDS	Reference data system
RM	Regulated market

RMBS	Residential mortgage backed securities
RPW	Reference price waiver
RTS	Regulatory Technical Standards
RTS on OTC Derivatives	Commission Delegated Regulation (EU) No 149/2013
RTS on CCP	Commission Delegated Regulation (EU) No 153/2013
SA	Sponsored access
SFI	Structured finance instrument
SFP	Structured finance product
SI	Systematic internaliser
SME	Small and medium sized enterprise
SME-GM	Small and medium sized enterprise – growth market
SMSG	Securities and Markets Stakeholder Group
SOR	Smart order routing
SPV	Special purpose vehicle
TFEU	Treaty on the Functioning of the European Union
TR	Trade repository
UPI	Universal product identifier
TTCA	Title transfer collateral arrangement
TV	Trading venue
UCITS	Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009, on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)
UTC	Coordinated universal time



WBS

Whole business securitisation

Executive Summary

Reasons for publication

This Consultation Paper (CP) seeks stakeholders' views on Regulatory Technical Standards (RTS) ESMA is required to draft under Regulation (EU) No 600/2014 (MiFIR). Under Article 10 of Regulation (EU) No 1095/2010 of the European Parliament and Council establishing ESMA (ESMA Regulation), ESMA needs to conduct a public consultation before submitting draft RTS to the Commission.

The input from stakeholders will help ESMA in finalising these draft technical standards. Respondents to this consultation are encouraged to provide the relevant data to support their arguments or proposals.

This paper complements the CP published on 19 December 2014 (ESMA/2014/1570) and seeks responses from stakeholders on transparency requirements for non-equity instruments not covered in the CP published in December 2014.

Contents

This CP covers the assessment of the liquidity and the specification of thresholds for large in scale and size specific to the instrument for the following asset classes: (1) foreign exchange derivatives, (2) credit derivatives, (3) other derivatives, and (4) contracts for difference.

The analysis presented follows the approach taken in the December 2014 CP. Furthermore, only additional elements are presented in this CP and elements already included in the December 2014 CP are not repeated. Both CPs should therefore be read in close conjunction.



Next steps

On the basis of the responses to this CP, ESMA will update the draft technical standards and the impact assessment and send the final report to the European Commission for endorsement.

1. Introduction

1. The final legislative texts of MiFID II and MiFIR were approved by the European Parliament on 15 April 2014 and by the European Council on 13 May 2014. The two texts were published in the Official Journal on 12 June 2014 and entered into force on the twentieth day following this publication – i.e. 2 July 2014.
2. On 22 May 2014 ESMA released a Discussion Paper (DP) presenting preliminary views and possible options for the development of the draft technical standards. The consultation period closed on 1 August 2014 and ESMA received 271 responses. On 7 and 8 July 2014, ESMA also hosted a public hearing on the DP which was well attended with around 350 physically present participants.
3. In the preliminary phase of development of the technical standards, and in addition to the DP and open hearing mentioned above, ESMA has requested the views of the Consultative Working Groups of the concerned standing committees and working groups (the majority of the topics falling under the Secondary Markets, Commodity Derivatives and Investor Protection and Intermediaries Standing Committees/Task Forces) and the Securities and Markets Stakeholder Group.
4. On 19 December 2014 ESMA released a Consultation Paper (CP) presenting draft regulatory technical standards and feedback from stakeholders to the May DP. This CP covered the majority of draft Regulatory Technical Standards (RTS) and Implementing Technical Standards (ITS) which ESMA is required to develop in this respect.
5. The section on transparency issues of the December CP did not cover some non-equity instruments and ESMA announced to present the analysis for these instruments in a separate CP in early 2015.
6. This CP presents the analysis of transparency issues for the following instruments: foreign exchange derivatives, credit derivatives, other derivatives, and contracts for difference. It builds on the analytical framework presented in the December CP and covers the assessment of the liquidity of these instruments and the specification of the large in scale (LIS) and size specific to the instrument (SSTI) thresholds for pre-trade and post-trade transparency purposes. The general methodological approach presented in the December CP applies to all non-equity instruments, including the ones presented in this CP, and is therefore not repeated. This CP should be read in close conjunction with the December CP.
7. In order to perform the above mentioned analysis on the definition of a liquid market and on the calculations of LIS and SSTI thresholds, ESMA used data collected from Trade Repositories (TRs). ESMA is fully aware of quality issues related to the data reported to

TRs, especially in the first months after the start of TR reporting. ESMA already put into practice in October 2014 a data quality plan to address those issues. They are mainly due to the absence of a commonly-agreed trade identifier, the incorrect or inconsistent reporting of some data fields or the difficulty that some counterparties faced in obtaining the LEI on time for the go-live of the trade repository system on 12 February 2014. Indeed, a wider use of a unique trade identifier and of the LEI would have facilitated reconciliation of the reports per and across TRs and ESMA's analysis. Furthermore, data quality issues are further exacerbated by the heterogeneous interpretation of the requirements provided by the Regulation in terms of product classification during the initial implementation period of the reporting system, which corresponds to the period available for a comprehensive analysis of the non-equity universe. However, ESMA considers that the quality of TRs' data is, all in all, sufficient to provide a general overview of the OTC trading activity of a class of derivatives over a certain period and encourages respondents to provide feedback on the outcome of the analysis performed.

2. Transparency

2.1. Foreign exchange derivatives

Liquid market definition

[Section 3.5 of the CP - Liquid market definition for non-equity financial instruments]

1. ESMA undertook an analysis on foreign exchange derivatives based on trade repositories (TRs) data. Data was collected over the period 1 March 2014 – 31 May 2014 and required an extensive cleaning and screening phase (for further details refer to Annex 2.1.1) that enabled identification of the following sub-classes:
 - i. Forwards:
 - a. Non-deliverable Forwards (NDF)
 - b. Deliverable Forwards (DF)
 - ii. Options
 - iii. Swaps
 - iv. Spread betting
2. In addition to the above, ESMA also collected data from trading venues over the period 1 June 2013 – 31 May 2014 that was used for the assessment of futures contracts. The details on the analysis for this class are provided in the *FX Futures* section on page 164.
3. The following charts represent the distribution of notional amount and trades recorded over the three-month period among the above classes:

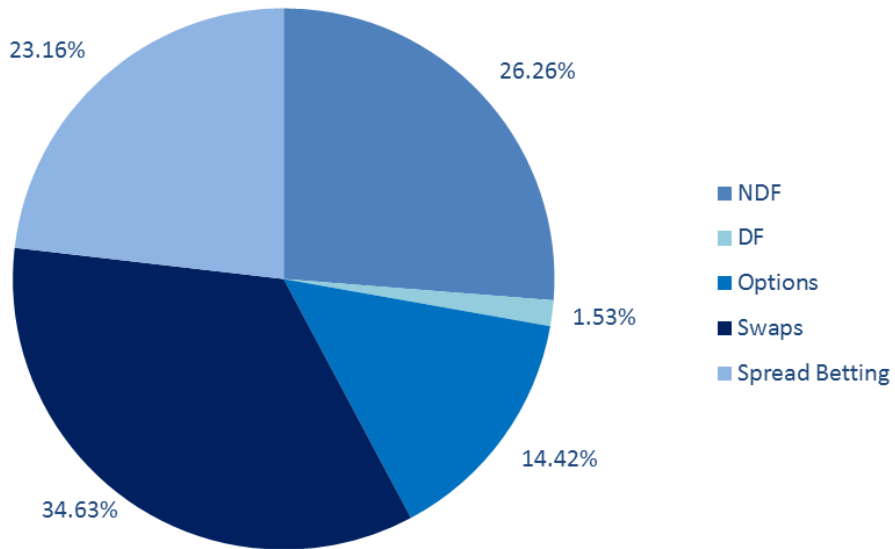


Chart 1: Foreign exchange derivatives – notional amount distribution¹

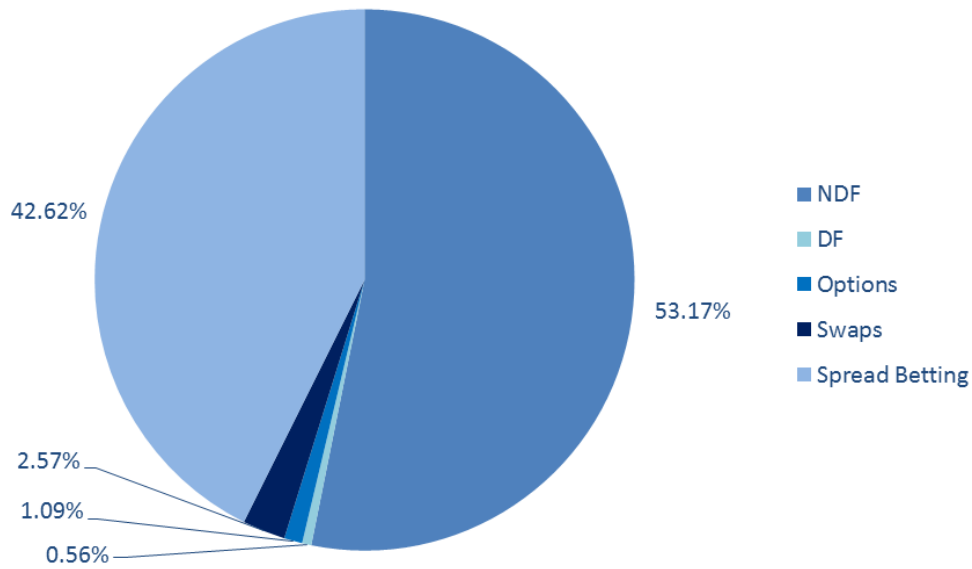


Chart 2: Foreign exchange derivatives – trades distribution²

- The next table provides for statistics in terms of number of trades, notional amount traded and days traded over the period considered, together with the results of the first

¹ Data collected from trading venues on FX futures is not included.

² Data collected from trading venues on FX futures is not included.

step of the analysis which required the classification of the above classes as liquid or illiquid on the basis of the following criteria³:

- i. average notional amount per day⁴ greater than or equal to €500 m ('notional amount per day' in the following tables);
- ii. number of days traded greater than or equal to 80% of the available trading days in the period⁵;
- iii. average number of trades per day⁶ greater than or equal to 100 ('number of trades per day in the following tables).

Forwards	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
NDF	13,943,947	98.97%	214,522	9,843,499,854,637	94.48%	151,438,459,302	92	142%	LIQUID
Deliverable Forwards	145,818	1.03%	2,243	575,379,855,667	5.52%	8,851,997,779	76	117%	LIQUID
Total	14,089,765	100.00%	216,766	10,418,879,710,304	100.00%	160,290,457,082	92	142%	
Options	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Total	285,888	100.00%	4,398	5,406,929,176,321	100.00%	83,183,525,790	90	138%	LIQUID
Swaps	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Total	674,478	100.00%	10,377	12,983,330,470,845	100.00%	199,743,545,705	81	125%	LIQUID
Spread Betting	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Total	11,176,785	100.00%	171,951	8,682,765,161,104	100.00%	133,581,002,479	79	122%	LIQUID

Table 1: FX Derivatives statistics (part I)⁷

5. The figures across all classes are well above the thresholds used, which are the same applied across all asset classes traded OTC and for which TRs data was used as a source for the analysis. Consequently, each class qualified as liquid as a whole and was

³ This step was not undertaken for FX futures.

⁴ Calculated as total notional amount traded divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁵ Calculated as the number of different days on which a trade was recorded divided by the number of trading days over the period, considered to be 65. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

⁶ Calculated as total number of trades divided by the number of trading days over the period, considered to be 65.

⁷ 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

further divided into sub-classes by means of an additional set of qualitative criteria. Subsequently, the liquidity of each sub-class was re-evaluated on the basis of quantitative thresholds, defined per class in terms of:

- i. average number of trades per day; and
- ii. average notional amount per day.

In addition to the above, as will be explained in more detail in the following sections, the following principles were followed in order to confirm the liquidity of each sub-class:

- iii. a sub-class meeting the thresholds for only one (or few) maturity(ies) was not deemed to be liquid. In other words, concentration of liquidity across maturities had to be present;
- iv. a 50% coverage ratio in terms of number of trades and notional amount had to be met for the entire asset class⁸. In other words, the total number of trades and the total notional amount traded of all the liquid sub-classes should represent 50% of the total number of trades and notional amount traded of the whole class.

6. The table below summarises per asset class the following information:

- i. the criteria used to define the related sub-classes (columns “Criterion to define sub-classes #1”, “Criterion to define sub-classes #2” and “Criterion to define sub-classes #3”). The criteria used may vary per asset class, e.g. for forwards the 3 criteria used are: (1) the delivery type used to distinguish between deliverable and non-deliverable forwards (2) the tenor and (3) the currency pair;
- ii. the total number of sub-classes identified using such criteria (column “Total num of sub-classes”), e.g. for NDF (non-deliverable forwards) a total number of 1469 sub-classes were defined;
- iii. the related number of sub-classes deemed to be liquid (column “Num of liquid sub-classes”) on the basis of the two quantitative criteria provided in the two subsequent columns (“Trades per day threshold” and “Notional per day (m EUR) threshold”), e.g. for NDF (non-deliverable forwards) a total number of 238 sub-classes are qualified as liquid since they recorded on average 1 trade and €10 m of notional amount per day;

⁸ Only for the class of options the 50% target has not been reached in terms of number of trades captured.

iv. the last two columns provide the percentage of trades and notional amount related to the liquid sub-classes (refer to columns “% of trades captured” and “% of notional amount captured”).

FX Derivatives	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
NDF	Delivery Type (used to distinguish between deliverable and non-deliverable)	Tenor	Currency pair	1469	244	1	10	97%	87%
Deliverable Forwards		Tenor	Currency pair	1364	74	1	10	68%	76%
Options	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Options	Tenor	Currency pair		1037	29	10	500	46%	66%
Swaps	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Swaps	Tenor	Currency pair		2009	80	5	250	64%	84%
Spread Betting	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Spread Betting	Tenor	Currency pair		209	37	50	10	98.61%	99.69%
Futures	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Futures	Tenor	Currency pair		24	5	1	0.03	84%	95%

Table 2: FX Derivatives statistics (part II)⁹

7. In the next sections the qualitative criteria to define the sub-classes and the results per sub-class in relation to the liquidity assessment are presented in more detail.

⁹ Only for the class of options the 50% target has not been reached in terms of number of trades captured.

FX Forwards

8. The class of FX forwards was first divided into two classes on the basis of the delivery type:
 - i. non-deliverable forwards (NDF) including all forwards whose delivery type was flagged as cash (Field 18 of Table 2 included in the delegated regulation (EU) No 148/2013); and
 - ii. deliverable forwards (DF) including all forwards whose delivery type was flagged as physical or optional for counterparty (Field 18 of Table 2 included in the delegated regulation (EU) No 148/2013).

9. Each class of FX forwards was then further divided into more granular sub-classes on the basis of the two following criteria:
 - i. the underlying currency pair;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. In particular, the following formula was applied:
 - a. Tenor = “< 1 week” when the difference between the maturity date and the execution date is greater than or equal to zero and smaller than 5 days;
 - b. Tenor = “1 week” when the difference between the maturity date and the execution date is greater than or equal to 5 days and smaller than 8 days;
 - c. Tenor = “1 month” when the difference between the maturity date and the execution date is greater than or equal to 8 days and smaller than 31 days;
 - d. Tenor = “3 months” when the difference between the maturity date and the execution date is greater than or equal to 31 days and smaller than 91 days;
 - e. Tenor = “6 months” when the difference between the maturity date and the execution date is greater than or equal to 91 days and smaller than 182 days;
 - f. Tenor = “1 year” when the difference between the maturity date and the execution date is greater than or equal to 182 days and smaller or equal to 365 days.
 - g. Tenor = “x years” where x is the number obtained by rounding up the ratio of days between maturity and execution date and 365 (e.g. 2.3) to the next whole number (3 years in this case). As a result, for the purpose of calculating the

figures included in the tables below [Table 3:Non-deliverable Forwards (NDF) - liquidity assessment and Table 4:Deliverable Forwards (DF) - liquidity assessment] a sub-class assigned with a tenor of “x years” includes all contracts with a maturity of more than “x-1 years” and less than or equal to “x years” (e.g. 2 years < 3 year tenor ≤ 3 years).

10. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the “Liquidity Flag” is based, are indicated. However, as stated above the classification of a sub-class as liquid was confirmed only if concentration of liquidity across tenors was present. In other words, if for a currency pair only one tenor was liquid it was deemed to be illiquid. The final classification of the sub-class as liquid is provided in the field “Final Liquidity Flag”. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered¹⁰.

¹⁰ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AED-SEK <1 week	2	0.03	57,260	881	Illiquid	Illiquid
AED-USD <1 week	7	0.11	2,952,329	45,420	Illiquid	Illiquid
AED-USD 1 week	11	0.17	9,459,495	145,531	Illiquid	Illiquid
AED-USD 1 month	16	0.25	20,337,550	312,885	Illiquid	Illiquid
AED-USD 3 months	1	0.02	7,028,172	108,126	Illiquid	Illiquid
AED-USD 6 months	2	0.03	261,964	4,030	Illiquid	Illiquid
AED-USD 1 year	3	0.05	2,003,878	30,829	Illiquid	Illiquid
AED-USD 2 years	1	0.02	62,726	965	Illiquid	Illiquid
AED-USD 3 years	1	0.02	62,726	965	Illiquid	Illiquid
ARS-JPY 1 year	5	0.08	9,088,326	139,820	Illiquid	Illiquid
ARS-JPY 3 years	6	0.09	15,358,339	236,282	Illiquid	Illiquid
ARS-USD <1 week	15	0.23	62,191,828	956,797	Illiquid	Illiquid
ARS-USD 1 week	8	0.12	2,611,932	40,184	Illiquid	Illiquid
ARS-USD 1 month	12	0.18	26,683,912	410,522	Illiquid	Illiquid
ARS-USD 3 months	42	0.65	98,257,492	1,511,654	Illiquid	Illiquid
ARS-USD 6 months	5	0.08	1,717,426	26,422	Illiquid	Illiquid
ARS-USD 1 year	1	0.02	212,114	3,263	Illiquid	Illiquid
AUD-CAD <1 week	19,167	294.88	172,520,577	2,654,163	Illiquid	Illiquid
AUD-CAD 1 week	810	12.46	96,269,216	1,481,065	Illiquid	Illiquid
AUD-CAD 1 month	3,387	52.11	11,471,846	176,490	Illiquid	Illiquid
AUD-CAD 3 months	71	1.09	66,664,853	1,025,613	Illiquid	Illiquid
AUD-CAD 6 months	3,698	56.89	144,356,264	2,220,866	Illiquid	Illiquid
AUD-CAD 1 year	896	13.78	90,441,357	1,391,405	Illiquid	Illiquid
AUD-CHF <1 week	12,395	190.69	90,966,348	1,399,482	Illiquid	Illiquid
AUD-CHF 1 week	550	8.46	20,883,129	321,279	Illiquid	Illiquid
AUD-CHF 1 month	2,192	33.72	28,956,155	445,479	Illiquid	Illiquid
AUD-CHF 3 months	167	2.57	276,630,280	4,255,850	Illiquid	Illiquid
AUD-CHF 6 months	2,059	31.68	39,933,873	614,367	Illiquid	Illiquid
AUD-CHF 1 year	175	2.69	1,014,427	15,607	Illiquid	Illiquid
AUD-CNH 1 week	1	0.02	116,756	1,796	Illiquid	Illiquid
AUD-CNH 6 months	9	0.14	1,858,183	28,587	Illiquid	Illiquid
AUD-CNY 3 months	1	0.02	118,097	1,817	Illiquid	Illiquid
AUD-CNY 6 months	2	0.03	6,695	103	Illiquid	Illiquid
AUD-CZK 1 week	1	0.02	22,094	340	Illiquid	Illiquid
AUD-CZK 6 months	5	0.08	1,275,568	19,624	Illiquid	Illiquid
AUD-DKK <1 week	550	8.46	4,419,461	67,992	Illiquid	Illiquid
AUD-DKK 1 week	3	0.05	140,751,907	2,165,414	Illiquid	Illiquid
AUD-DKK 1 month	30	0.46	38,473,751	591,904	Illiquid	Illiquid
AUD-DKK 3 months	45	0.69	154,869,166	2,382,603	Illiquid	Illiquid
AUD-DKK 6 months	56	0.86	171,266,961	2,634,876	Illiquid	Illiquid
AUD-DKK 1 year	2	0.03	360,198	5,542	Illiquid	Illiquid
AUD-EUR <1 week	105,640	1,625.23	2,789,739,787	42,919,074	Liquid	Liquid
AUD-EUR 1 week	4,158	63.97	546,100,573	8,401,547	Illiquid	Liquid
AUD-EUR 1 month	18,553	285.43	576,821,278	8,874,174	Illiquid	Liquid
AUD-EUR 3 months	809	12.45	1,635,299,474	25,158,453	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-EUR__6 months	8,973	138.05	1,010,632,146	15,548,187	Liquid	Liquid
AUD-EUR__1 year	1,895	29.15	84,641,226	1,302,173	Illiquid	Illiquid
AUD-EUR__2 years	71	1.09	71,299,152	1,096,910	Illiquid	Illiquid
AUD-EUR__3 years	1	0.02	1,162,265	17,881	Illiquid	Illiquid
AUD-GBP__<1 week	55,813	858.66	2,414,643,955	37,148,369	Liquid	Liquid
AUD-GBP__1 week	2,970	45.69	2,337,021,424	35,954,176	Liquid	Liquid
AUD-GBP__1 month	18,433	283.58	1,351,773,700	20,796,518	Liquid	Liquid
AUD-GBP__3 months	368	5.66	3,387,437,902	52,114,429	Liquid	Liquid
AUD-GBP__6 months	3,961	60.94	750,379,464	11,544,299	Liquid	Liquid
AUD-GBP__1 year	1,209	18.60	272,873,949	4,198,061	Illiquid	Illiquid
AUD-GBP__2 years	14	0.22	6,307,252	97,035	Illiquid	Illiquid
AUD-HKD__1 week	6	0.09	559,044	8,601	Illiquid	Illiquid
AUD-HKD__1 month	8	0.12	668,625	10,287	Illiquid	Illiquid
AUD-HKD__3 months	8	0.12	32,353	498	Illiquid	Illiquid
AUD-HKD__6 months	16	0.25	858,309	13,205	Illiquid	Illiquid
AUD-HUF__<1 week	56	0.86	224,957	3,461	Illiquid	Illiquid
AUD-HUF__1 week	2	0.03	267,806	4,120	Illiquid	Illiquid
AUD-HUF__6 months	20	0.31	568,775,502	8,750,392	Illiquid	Illiquid
AUD-JPY__<1 week	48,416	744.86	16,616,335,324	255,635,928	Liquid	Liquid
AUD-JPY__1 week	1,452	22.34	2,681,029,866	41,246,613	Liquid	Liquid
AUD-JPY__1 month	6,448	99.20	1,029,901,745	15,844,642	Liquid	Liquid
AUD-JPY__3 months	323	4.97	2,147,724,010	33,041,908	Liquid	Liquid
AUD-JPY__6 months	9,291	142.94	72,927,296,391	1,121,958,406	Liquid	Liquid
AUD-JPY__1 year	1,161	17.86	7,884,519	121,300	Illiquid	Illiquid
AUD-JPY__2 years	4	0.06	7,503,442	115,438	Illiquid	Illiquid
AUD-MXN__6 months	13	0.20	398,742	6,134	Illiquid	Illiquid
AUD-NOK__<1 week	2	0.03	96,410	1,483	Illiquid	Illiquid
AUD-NOK__1 week	3	0.05	468,384	7,206	Illiquid	Illiquid
AUD-NOK__1 month	32	0.49	164,831,443	2,535,868	Illiquid	Illiquid
AUD-NOK__3 months	17	0.26	304,479,751	4,684,304	Illiquid	Illiquid
AUD-NOK__6 months	61	0.94	45,266,340	696,405	Illiquid	Illiquid
AUD-NZD__<1 week	27,514	423.29	440,920,609	6,783,394	Illiquid	Illiquid
AUD-NZD__1 week	2,745	42.23	123,416,193	1,898,711	Illiquid	Illiquid
AUD-NZD__1 month	5,652	86.95	94,018,760	1,446,442	Illiquid	Illiquid
AUD-NZD__3 months	307	4.72	46,335,361	712,852	Illiquid	Illiquid
AUD-NZD__6 months	5,856	90.09	242,533,925	3,731,291	Illiquid	Illiquid
AUD-NZD__1 year	1,246	19.17	20,761,137	319,402	Illiquid	Illiquid
AUD-NZD__2 years	2	0.03	7,337	113	Illiquid	Illiquid
AUD-PLN__<1 week	199	3.06	1,946,277	29,943	Illiquid	Illiquid
AUD-PLN__6 months	1	0.02	9,524	147	Illiquid	Illiquid
AUD-SEK__1 week	2	0.03	137,250	2,112	Illiquid	Illiquid
AUD-SEK__1 month	19	0.29	12,832,141	197,418	Illiquid	Illiquid
AUD-SEK__3 months	15	0.23	12,135,498	186,700	Illiquid	Illiquid
AUD-SEK__6 months	37	0.57	8,074,819	124,228	Illiquid	Illiquid
AUD-SGD__<1 week	763	11.74	17,595,936	270,707	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-SGD_1 week	17	0.26	888,914	13,676	Illiquid	Illiquid
AUD-SGD_1 month	33	0.51	408,347	6,282	Illiquid	Illiquid
AUD-SGD_3 months	10	0.15	157,568	2,424	Illiquid	Illiquid
AUD-SGD_6 months	172	2.65	22,784,824	350,536	Illiquid	Illiquid
AUD-TRY_6 months	27	0.42	911,162	14,018	Illiquid	Illiquid
AUD-USD_<1 week	851,277	13,096.57	19,489,274,183	299,834,987	Liquid	Liquid
AUD-USD_1 week	13,983	215.12	5,285,624,004	81,317,292	Liquid	Liquid
AUD-USD_1 month	68,843	1,059.12	4,794,318,956	73,758,753	Liquid	Liquid
AUD-USD_3 months	1,567	24.11	11,718,589,292	180,285,989	Liquid	Liquid
AUD-USD_6 months	23,995	369.15	2,315,093,219	35,616,819	Liquid	Liquid
AUD-USD_1 year	6,433	98.97	604,909,107	9,306,294	Illiquid	Illiquid
AUD-USD_2 years	31	0.48	33,016,256	507,942	Illiquid	Illiquid
AUD-ZAR_6 months	20	0.31	9,294,751	142,996	Illiquid	Illiquid
BGN-CHF_<1 week	10	0.15	28,712	442	Illiquid	Illiquid
BGN-RON_<1 week	7	0.11	5,113	79	Illiquid	Illiquid
BHD-USD_<1 week	1	0.02	123,116	1,894	Illiquid	Illiquid
BRL-CAD_2 years	1	0.02	613,484	9,438	Illiquid	Illiquid
BRL-CAD_3 years	1	0.02	408,990	6,292	Illiquid	Illiquid
BRL-CHF_3 months	3	0.05	1,924,989	29,615	Illiquid	Illiquid
BRL-CHF_6 months	6	0.09	6,251,422	96,176	Illiquid	Illiquid
BRL-CHF_1 year	2	0.03	3,526,443	54,253	Illiquid	Illiquid
BRL-EUR_<1 week	13	0.20	225,597,699	3,470,734	Illiquid	Illiquid
BRL-EUR_1 week	15	0.23	62,247,866	957,659	Illiquid	Illiquid
BRL-EUR_1 month	108	1.66	296,662,639	4,564,041	Illiquid	Illiquid
BRL-EUR_3 months	101	1.55	244,530,529	3,762,008	Illiquid	Illiquid
BRL-EUR_6 months	33	0.51	69,996,265	1,076,866	Illiquid	Illiquid
BRL-EUR_1 year	30	0.46	16,885,624	259,779	Illiquid	Illiquid
BRL-EUR_2 years	21	0.32	225,267,299	3,465,651	Illiquid	Illiquid
BRL-JPY_<1 week	5	0.08	829,423	12,760	Illiquid	Illiquid
BRL-JPY_1 week	3	0.05	10,944,093	168,371	Illiquid	Illiquid
BRL-JPY_1 month	60	0.92	1,614,355,042	24,836,231	Illiquid	Illiquid
BRL-JPY_3 months	190	2.92	1,857,277,141	28,573,494	Liquid	Illiquid
BRL-JPY_6 months	1	0.02	2,494,157	38,372	Illiquid	Illiquid
BRL-SEK_3 months	3	0.05	45,491,117	699,863	Illiquid	Illiquid
BRL-SEK_6 months	1	0.02	1,282,343	19,728	Illiquid	Illiquid
BRL-SEK_1 year	1	0.02	510,058	7,847	Illiquid	Illiquid
BRL-SEK_2 years	1	0.02	127,515	1,962	Illiquid	Illiquid
BRL-SEK_3 years	1	0.02	807,592	12,424	Illiquid	Illiquid
BRL-SEK_4 years	1	0.02	127,515	1,962	Illiquid	Illiquid
BRL-SEK_5 years	1	0.02	127,515	1,962	Illiquid	Illiquid
BRL-USD_<1 week	408	6.28	5,047,114,656	77,647,918	Liquid	Liquid
BRL-USD_1 week	455	7.00	5,398,109,138	83,047,833	Liquid	Liquid
BRL-USD_1 month	1,264	19.45	7,784,706,330	119,764,713	Liquid	Liquid
BRL-USD_3 months	1,270	19.54	7,009,922,643	107,844,964	Liquid	Liquid
BRL-USD_6 months	145	2.23	1,589,225,911	24,449,629	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
BRL-USD__1 year	62	0.95	169,386,747	2,605,950	Illiquid	Illiquid
BRL-USD__2 years	37	0.57	2,097,582,100	32,270,494	Illiquid	Illiquid
BRL-USD__3 years	8	0.12	58,743,850	903,752	Illiquid	Illiquid
BRL-USD__4 years	7	0.11	47,140,127	725,233	Illiquid	Illiquid
BRL-USD__5 years	2	0.03	13,054,189	200,834	Illiquid	Illiquid
CAD-CHF__<1 week	8,727	134.26	88,415,031	1,360,231	Illiquid	Illiquid
CAD-CHF__1 week	201	3.09	56,228,306	865,051	Illiquid	Illiquid
CAD-CHF__1 month	1,172	18.03	10,388,925	159,830	Illiquid	Illiquid
CAD-CHF__3 months	119	1.83	218,357,365	3,359,344	Illiquid	Illiquid
CAD-CHF__6 months	1,781	27.40	19,985,258	307,466	Illiquid	Illiquid
CAD-CHF__1 year	593	9.12	5,664,500	87,146	Illiquid	Illiquid
CAD-CHF__2 years	3	0.05	336,387	5,175	Illiquid	Illiquid
CAD-CZK__1 month	1	0.02	12,400	191	Illiquid	Illiquid
CAD-CZK__3 months	4	0.06	179,553	2,762	Illiquid	Illiquid
CAD-DKK__1 week	1	0.02	1,649	25	Illiquid	Illiquid
CAD-DKK__1 month	34	0.52	45,459,500	699,377	Illiquid	Illiquid
CAD-DKK__3 months	46	0.71	121,404,897	1,867,768	Illiquid	Illiquid
CAD-DKK__6 months	37	0.57	12,588,139	193,664	Illiquid	Illiquid
CAD-DKK__1 year	3	0.05	3,001,102	46,171	Illiquid	Illiquid
CAD-EUR__<1 week	39,431	606.63	1,032,149,173	15,879,218	Liquid	Liquid
CAD-EUR__1 week	1,850	28.46	305,247,196	4,696,111	Illiquid	Liquid
CAD-EUR__1 month	6,798	104.58	636,633,907	9,794,368	Illiquid	Liquid
CAD-EUR__3 months	778	11.97	1,193,654,051	18,363,908	Liquid	Liquid
CAD-EUR__6 months	9,582	147.42	740,636,669	11,394,410	Liquid	Liquid
CAD-EUR__1 year	772	11.88	149,152,837	2,294,659	Illiquid	Illiquid
CAD-EUR__2 years	61	0.94	86,675,113	1,333,463	Illiquid	Illiquid
CAD-EUR__3 years	4	0.06	1,832,985	28,200	Illiquid	Illiquid
CAD-GBP__<1 week	49,122	755.72	1,928,811,009	29,674,016	Liquid	Liquid
CAD-GBP__1 week	4,105	63.15	1,715,921,485	26,398,792	Liquid	Liquid
CAD-GBP__1 month	10,528	161.97	421,518,088	6,484,894	Illiquid	Liquid
CAD-GBP__3 months	367	5.65	2,828,085,161	43,509,002	Liquid	Liquid
CAD-GBP__6 months	4,282	65.88	530,825,411	8,166,545	Illiquid	Illiquid
CAD-GBP__1 year	479	7.37	252,120,608	3,878,779	Illiquid	Illiquid
CAD-GBP__2 years	2	0.03	628,643	9,671	Illiquid	Illiquid
CAD-HKD__1 week	2	0.03	240,156	3,695	Illiquid	Illiquid
CAD-HUF__<1 week	2	0.03	17,149	264	Illiquid	Illiquid
CAD-INR__1 year	3	0.05	1,084,682	16,687	Illiquid	Illiquid
CAD-INR__2 years	2	0.03	1,757,813	27,043	Illiquid	Illiquid
CAD-JPY__<1 week	19,875	305.77	1,220,201,668	18,772,333	Liquid	Illiquid
CAD-JPY__1 week	383	5.89	71,183,332	1,095,128	Illiquid	Illiquid
CAD-JPY__1 month	3,368	51.82	317,293,950	4,881,445	Illiquid	Illiquid
CAD-JPY__3 months	51	0.78	55,283,437	850,514	Illiquid	Illiquid
CAD-JPY__6 months	4,244	65.29	2,307,440,490	35,499,084	Liquid	Illiquid
CAD-JPY__1 year	444	6.83	2,439,703	37,534	Illiquid	Illiquid
CAD-JPY__2 years	3	0.05	137,894	2,121	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CAD-MXN_1 week	5	0.08	2,440,457	37,545	Illiquid	Illiquid
CAD-MXN_1 month	13	0.20	6,991,579	107,563	Illiquid	Illiquid
CAD-MXN_3 months	7	0.11	5,012,830	77,120	Illiquid	Illiquid
CAD-MXN_6 months	6	0.09	3,317,493	51,038	Illiquid	Illiquid
CAD-NOK_<1 week	134	2.06	1,065,886	16,398	Illiquid	Illiquid
CAD-NOK_1 week	1	0.02	52,767	812	Illiquid	Illiquid
CAD-NOK_1 month	32	0.49	351,616,193	5,409,480	Illiquid	Illiquid
CAD-NOK_3 months	4	0.06	139,679,281	2,148,912	Illiquid	Illiquid
CAD-NOK_6 months	41	0.63	22,228,656	341,979	Illiquid	Illiquid
CAD-NZD_<1 week	14,341	220.63	75,730,477	1,165,084	Illiquid	Illiquid
CAD-NZD_1 week	581	8.94	4,318,299	66,435	Illiquid	Illiquid
CAD-NZD_1 month	1,406	21.63	5,711,110	87,863	Illiquid	Illiquid
CAD-NZD_3 months	60	0.92	2,546,429	39,176	Illiquid	Illiquid
CAD-NZD_6 months	1,600	24.62	13,375,392	205,775	Illiquid	Illiquid
CAD-NZD_1 year	62	0.95	426,632	6,564	Illiquid	Illiquid
CAD-PLN_6 months	4	0.06	117,397	1,806	Illiquid	Illiquid
CAD-SEK_<1 week	132	2.03	635,178	9,772	Illiquid	Illiquid
CAD-SEK_1 month	19	0.29	5,817,521	89,500	Illiquid	Illiquid
CAD-SEK_3 months	7	0.11	3,428,493	52,746	Illiquid	Illiquid
CAD-SEK_6 months	43	0.66	6,952,998	106,969	Illiquid	Illiquid
CAD-SEK_1 year	2	0.03	1,055,333	16,236	Illiquid	Illiquid
CAD-SGD_1 week	1	0.02	13,192	203	Illiquid	Illiquid
CAD-SGD_3 months	29	0.45	822,723	12,657	Illiquid	Illiquid
CAD-SGD_6 months	20	0.31	1,586,531	24,408	Illiquid	Illiquid
CAD-TRY_6 months	7	0.11	88,268	1,358	Illiquid	Illiquid
CAD-USD_<1 week	356,205	5,480.08	7,399,780,114	113,842,771	Liquid	Liquid
CAD-USD_1 week	6,745	103.77	597,626,223	9,194,250	Illiquid	Liquid
CAD-USD_1 month	37,225	572.69	776,809,622	11,950,917	Liquid	Liquid
CAD-USD_3 months	1,407	21.65	2,990,461,671	46,007,103	Liquid	Liquid
CAD-USD_6 months	13,786	212.09	1,109,498,428	17,069,207	Liquid	Liquid
CAD-USD_1 year	4,924	75.75	204,723,449	3,149,592	Illiquid	Illiquid
CAD-USD_2 years	43	0.66	51,489,000	792,138	Illiquid	Illiquid
CHF-CZK_<1 week	1	0.02	82,033	1,262	Illiquid	Illiquid
CHF-CZK_1 week	2	0.03	15,368	236	Illiquid	Illiquid
CHF-CZK_1 month	2	0.03	2,660,182	40,926	Illiquid	Illiquid
CHF-CZK_3 months	2	0.03	221,648	3,410	Illiquid	Illiquid
CHF-CZK_6 months	2	0.03	1,852,065	28,493	Illiquid	Illiquid
CHF-CZK_1 year	3	0.05	8,665,987	133,323	Illiquid	Illiquid
CHF-CZK_3 years	2	0.03	3,363,364	51,744	Illiquid	Illiquid
CHF-CZK_4 years	11	0.17	21,492,714	330,657	Illiquid	Illiquid
CHF-CZK_5 years	8	0.12	11,402,623	175,425	Illiquid	Illiquid
CHF-DKK_<1 week	12	0.18	12,541,125	192,940	Illiquid	Illiquid
CHF-DKK_1 week	13	0.20	7,965,569	122,547	Illiquid	Illiquid
CHF-DKK_1 month	45	0.69	43,974,971	676,538	Illiquid	Illiquid
CHF-DKK_3 months	121	1.86	137,056,211	2,108,557	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-DKK__6 months	91	1.40	74,748,904	1,149,983	Illiquid	Illiquid
CHF-DKK__1 year	18	0.28	21,485,000	330,538	Illiquid	Illiquid
CHF-EUR__<1 week	110,359	1,697.83	5,201,554,408	80,023,914	Liquid	Liquid
CHF-EUR__1 week	3,898	59.97	1,627,381,321	25,036,636	Liquid	Liquid
CHF-EUR__1 month	10,812	166.34	3,089,867,835	47,536,428	Liquid	Liquid
CHF-EUR__3 months	1,467	22.57	7,556,032,419	116,246,653	Liquid	Liquid
CHF-EUR__6 months	17,378	267.35	3,664,502,948	56,376,968	Liquid	Liquid
CHF-EUR__1 year	818	12.58	218,788,109	3,365,971	Illiquid	Illiquid
CHF-EUR__2 years	111	1.71	68,124,300	1,048,066	Illiquid	Illiquid
CHF-EUR__3 years	17	0.26	82,510,613	1,269,394	Illiquid	Illiquid
CHF-EUR__4 years	4	0.06	9,845,772	151,473	Illiquid	Illiquid
CHF-EUR__5 years	3	0.05	18,557,484	285,500	Illiquid	Illiquid
CHF-EUR__6 years	1	0.02	95,000	1,462	Illiquid	Illiquid
CHF-EUR__7 years	1	0.02	91,000	1,400	Illiquid	Illiquid
CHF-GBP__<1 week	74,412	1,144.80	2,004,212,209	30,834,034	Liquid	Liquid
CHF-GBP__1 week	1,773	27.28	3,159,198,883	48,603,060	Liquid	Liquid
CHF-GBP__1 month	7,103	109.28	1,903,846,179	29,289,941	Liquid	Liquid
CHF-GBP__3 months	545	8.38	5,714,840,162	87,920,618	Liquid	Liquid
CHF-GBP__6 months	5,814	89.45	1,062,554,680	16,346,995	Liquid	Liquid
CHF-GBP__1 year	2,518	38.74	129,582,529	1,993,577	Illiquid	Illiquid
CHF-GBP__2 years	14	0.22	12,188,650	187,518	Illiquid	Illiquid
CHF-HKD__<1 week	1	0.02	82,033	1,262	Illiquid	Illiquid
CHF-HKD__1 week	2	0.03	145,139	2,233	Illiquid	Illiquid
CHF-HKD__1 month	3	0.05	198,105	3,048	Illiquid	Illiquid
CHF-HKD__3 months	22	0.34	54,106,716	832,411	Illiquid	Illiquid
CHF-HKD__6 months	1	0.02	362,912	5,583	Illiquid	Illiquid
CHF-HUF__<1 week	243	3.74	105,420,123	1,621,848	Illiquid	Illiquid
CHF-HUF__1 week	11	0.17	3,841,583	59,101	Illiquid	Illiquid
CHF-HUF__1 month	30	0.46	9,406,431,933	144,714,337	Illiquid	Illiquid
CHF-HUF__3 months	33	0.51	149,067,935	2,293,353	Illiquid	Illiquid
CHF-HUF__6 months	166	2.55	1,863,452,808	28,668,505	Liquid	Illiquid
CHF-HUF__2 years	1	0.02	2,070,290	31,851	Illiquid	Illiquid
CHF-ISK__3 months	2	0.03	90,237	1,388	Illiquid	Illiquid
CHF-JPY__<1 week	24,781	381.25	2,551,613,462	39,255,592	Liquid	Liquid
CHF-JPY__1 week	536	8.25	422,746,714	6,503,796	Illiquid	Liquid
CHF-JPY__1 month	4,285	65.92	504,612,949	7,763,276	Illiquid	Liquid
CHF-JPY__3 months	109	1.68	854,121,503	13,140,331	Liquid	Liquid
CHF-JPY__6 months	3,418	52.58	19,500,496,347	300,007,636	Liquid	Liquid
CHF-JPY__1 year	647	9.95	3,601,601	55,409	Illiquid	Illiquid
CHF-KRW__1 year	1	0.02	554,468	8,530	Illiquid	Illiquid
CHF-MXN__3 months	30	0.46	35,843,872	551,444	Illiquid	Illiquid
CHF-MXN__6 months	5	0.08	18,807,029	289,339	Illiquid	Illiquid
CHF-MYR__6 months	1	0.02	267,295	4,112	Illiquid	Illiquid
CHF-NOK__<1 week	211	3.25	1,599,984	24,615	Illiquid	Illiquid
CHF-NOK__1 week	12	0.18	21,409,016	329,369	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-NOK_1 month	56	0.86	205,376,669	3,159,641	Illiquid	Illiquid
CHF-NOK_3 months	118	1.82	186,923,035	2,875,739	Illiquid	Illiquid
CHF-NOK_6 months	395	6.08	388,878,289	5,982,743	Illiquid	Illiquid
CHF-NOK_1 year	4	0.06	949,413	14,606	Illiquid	Illiquid
CHF-NOK_2 years	3	0.05	452,620	6,963	Illiquid	Illiquid
CHF-NZD_<1 week	4,664	71.75	26,101,248	401,558	Illiquid	Illiquid
CHF-NZD_1 week	178	2.74	11,791,147	181,402	Illiquid	Illiquid
CHF-NZD_1 month	442	6.80	7,097,187	109,187	Illiquid	Illiquid
CHF-NZD_3 months	25	0.38	49,999,479	769,223	Illiquid	Illiquid
CHF-NZD_6 months	920	14.15	8,459,283	130,143	Illiquid	Illiquid
CHF-NZD_1 year	55	0.85	440,467	6,776	Illiquid	Illiquid
CHF-PLN_<1 week	528	8.12	3,972,871	61,121	Illiquid	Illiquid
CHF-PLN_1 month	12	0.18	10,728,355	165,052	Illiquid	Illiquid
CHF-PLN_3 months	33	0.51	29,277,841	450,428	Illiquid	Illiquid
CHF-PLN_6 months	181	2.78	31,836,690	489,795	Illiquid	Illiquid
CHF-PLN_1 year	7	0.11	1,575,526	24,239	Illiquid	Illiquid
CHF-PLN_2 years	2	0.03	115,060	1,770	Illiquid	Illiquid
CHF-ROn_<1 week	1	0.02	4,922	76	Illiquid	Illiquid
CHF-RUB_3 months	1	0.02	166,856	2,567	Illiquid	Illiquid
CHF-SEK_<1 week	10	0.15	134,729	2,073	Illiquid	Illiquid
CHF-SEK_1 week	13	0.20	25,588,352	393,667	Illiquid	Illiquid
CHF-SEK_1 month	41	0.63	39,109,504	601,685	Illiquid	Illiquid
CHF-SEK_3 months	35	0.54	123,273,284	1,896,512	Illiquid	Illiquid
CHF-SEK_6 months	326	5.02	159,506,122	2,453,940	Illiquid	Illiquid
CHF-SEK_1 year	6	0.09	4,921,996	75,723	Illiquid	Illiquid
CHF-SGD_<1 week	1,062	16.34	6,198,233	95,357	Illiquid	Illiquid
CHF-SGD_1 week	2	0.03	1,119,562	17,224	Illiquid	Illiquid
CHF-SGD_1 month	21	0.32	3,384,155	52,064	Illiquid	Illiquid
CHF-SGD_3 months	28	0.43	16,996,806	261,489	Illiquid	Illiquid
CHF-SGD_6 months	44	0.68	6,651,134	102,325	Illiquid	Illiquid
CHF-THB_3 months	1	0.02	1,904,773	29,304	Illiquid	Illiquid
CHF-TRY_<1 week	39	0.60	316,648	4,872	Illiquid	Illiquid
CHF-TRY_1 month	1	0.02	164,067	2,524	Illiquid	Illiquid
CHF-TRY_3 months	19	0.29	11,840,779	182,166	Illiquid	Illiquid
CHF-TRY_6 months	162	2.49	17,837,589	274,424	Illiquid	Illiquid
CHF-TRY_1 year	20	0.31	5,564,114	85,602	Illiquid	Illiquid
CHF-TRY_2 years	6	0.09	969,923	14,922	Illiquid	Illiquid
CHF-USD_<1 week	338,302	5,204.65	7,796,686,793	119,949,028	Liquid	Liquid
CHF-USD_1 week	6,323	97.28	9,599,945,299	147,691,466	Liquid	Liquid
CHF-USD_1 month	30,728	472.74	6,063,020,160	93,277,233	Liquid	Liquid
CHF-USD_3 months	1,744	26.83	15,167,907,263	233,352,419	Liquid	Liquid
CHF-USD_6 months	19,140	294.46	1,545,375,381	23,775,006	Liquid	Liquid
CHF-USD_1 year	3,439	52.91	198,225,232	3,049,619	Illiquid	Illiquid
CHF-USD_2 years	26	0.40	14,205,991	218,554	Illiquid	Illiquid
CHF-ZAR_1 month	1	0.02	962,834	14,813	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-ZAR_3 months	15	0.23	23,424,910	360,383	Illiquid	Illiquid
CHF-ZAR_6 months	33	0.51	16,218,019	249,508	Illiquid	Illiquid
CHF-ZAR_2 years	1	0.02	100,621	1,548	Illiquid	Illiquid
CLP-DKK_3 months	1	0.02	1,039,727	15,996	Illiquid	Illiquid
CLP-EUR_<1 week	5	0.08	7,374,430	113,453	Illiquid	Illiquid
CLP-EUR_1 week	4	0.06	4,380,002	67,385	Illiquid	Illiquid
CLP-EUR_1 month	3	0.05	1,688,797	25,981	Illiquid	Illiquid
CLP-EUR_3 months	76	1.17	60,917,354	937,190	Illiquid	Illiquid
CLP-EUR_6 months	7	0.11	82,080,588	1,262,778	Illiquid	Illiquid
CLP-EUR_1 year	1	0.02	1,434,346	22,067	Illiquid	Illiquid
CLP-JPY_1 week	1	0.02	180,764	2,781	Illiquid	Illiquid
CLP-JPY_6 months	1	0.02	180,764	2,781	Illiquid	Illiquid
CLP-SEK_1 year	2	0.03	828,533	12,747	Illiquid	Illiquid
CLP-USD_<1 week	113	1.74	376,144,815	5,786,843	Illiquid	Illiquid
CLP-USD_1 week	66	1.02	557,498,325	8,576,897	Illiquid	Illiquid
CLP-USD_1 month	165	2.54	1,810,885,803	27,859,782	Liquid	Liquid
CLP-USD_3 months	860	13.23	7,217,676,002	111,041,169	Liquid	Liquid
CLP-USD_6 months	105	1.62	11,523,079,872	177,278,152	Liquid	Liquid
CLP-USD_1 year	31	0.48	164,641,170	2,532,941	Illiquid	Illiquid
CLP-USD_2 years	15	0.23	404,225,295	6,218,851	Illiquid	Illiquid
CLP-USD_3 years	7	0.11	588,311,581	9,050,947	Illiquid	Illiquid
CLP-USD_6 years	1	0.02	260,330	4,005	Illiquid	Illiquid
CNH-DKK_1 month	1	0.02	81,747	1,258	Illiquid	Illiquid
CNH-DKK_3 months	2	0.03	163,494	2,515	Illiquid	Illiquid
CNH-HKD_6 months	5	0.08	138,462	2,130	Illiquid	Illiquid
CNH-JPY_3 months	1	0.02	717,714	11,042	Illiquid	Illiquid
CNH-JPY_6 months	286	4.40	91,787,336	1,412,113	Illiquid	Illiquid
CNH-JPY_2 years	2	0.03	1,674,666	25,764	Illiquid	Illiquid
CNH-USD_<1 week	5	0.08	13,718,061	211,047	Illiquid	Illiquid
CNH-USD_1 week	3	0.05	8,365,256	128,696	Illiquid	Illiquid
CNH-USD_1 month	9	0.14	20,962,278	322,497	Illiquid	Illiquid
CNH-USD_3 months	20	0.31	61,027,808	938,889	Illiquid	Illiquid
CNH-USD_6 months	481	7.40	417,257,854	6,419,352	Illiquid	Illiquid
CNH-USD_1 year	66	1.02	326,848,211	5,028,434	Illiquid	Illiquid
CNH-USD_2 years	25	0.38	114,102,300	1,755,420	Illiquid	Illiquid
CNY-EUR_<1 week	558	8.58	157,641,072	2,425,247	Illiquid	Illiquid
CNY-EUR_1 week	57	0.88	656,756,013	10,103,939	Illiquid	Illiquid
CNY-EUR_1 month	176	2.71	848,443,170	13,052,972	Liquid	Liquid
CNY-EUR_3 months	251	3.86	1,655,430,573	25,468,163	Liquid	Liquid
CNY-EUR_6 months	71	1.09	205,846,292	3,166,866	Illiquid	Illiquid
CNY-EUR_1 year	108	1.66	458,026,885	7,046,567	Illiquid	Illiquid
CNY-EUR_2 years	93	1.43	315,009,425	4,846,299	Illiquid	Illiquid
CNY-EUR_3 years	2	0.03	408,184	6,280	Illiquid	Illiquid
CNY-HKD_1 month	1	0.02	17,711	272	Illiquid	Illiquid
CNY-JPY_1 month	2	0.03	493,056	7,585	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CNY-JPY__3 months	3	0.05	954,555	14,685	Illiquid	Illiquid
CNY-JPY__6 months	9	0.14	600,502	9,238	Illiquid	Illiquid
CNY-JPY__1 year	2	0.03	143,734	2,211	Illiquid	Illiquid
CNY-USD__<1 week	4,269	65.68	2,768,286,608	42,589,025	Liquid	Liquid
CNY-USD__1 week	366	5.63	3,815,163,169	58,694,818	Liquid	Liquid
CNY-USD__1 month	1,209	18.60	12,310,004,760	189,384,689	Liquid	Liquid
CNY-USD__3 months	1,760	27.08	18,070,361,956	278,005,569	Liquid	Liquid
CNY-USD__6 months	420	6.46	4,497,727,025	69,195,800	Liquid	Liquid
CNY-USD__1 year	989	15.22	7,696,681,965	118,410,492	Liquid	Liquid
CNY-USD__2 years	1,007	15.49	6,707,776,480	103,196,561	Liquid	Liquid
CNY-USD__3 years	42	0.65	341,308,629	5,250,902	Illiquid	Illiquid
COP-EUR__<1 week	4	0.06	12,885,538	198,239	Illiquid	Illiquid
COP-EUR__1 week	8	0.12	20,439,633	314,456	Illiquid	Illiquid
COP-EUR__1 month	9	0.14	2,784,087	42,832	Illiquid	Illiquid
COP-EUR__3 months	23	0.35	67,105,497	1,032,392	Illiquid	Illiquid
COP-EUR__1 year	1	0.02	150,000	2,308	Illiquid	Illiquid
COP-EUR__3 years	2	0.03	3,059,898	47,075	Illiquid	Illiquid
COP-JPY__1 week	1	0.02	199,299	3,066	Illiquid	Illiquid
COP-JPY__6 months	1	0.02	199,299	3,066	Illiquid	Illiquid
COP-SEK__1 month	1	0.02	882,756	13,581	Illiquid	Illiquid
COP-SEK__3 months	2	0.03	835,540	12,854	Illiquid	Illiquid
COP-USD__<1 week	68	1.05	12,711,461,631	195,560,948	Liquid	Liquid
COP-USD__1 week	59	0.91	22,617,358,434	347,959,361	Illiquid	Liquid
COP-USD__1 month	113	1.74	22,133,253,903	340,511,599	Liquid	Liquid
COP-USD__3 months	292	4.49	7,366,934,084	113,337,447	Liquid	Liquid
COP-USD__6 months	53	0.82	7,160,113,544	110,155,593	Illiquid	Illiquid
COP-USD__1 year	5	0.08	14,628,523	225,054	Illiquid	Illiquid
COP-USD__2 years	4	0.06	2,063,586	31,747	Illiquid	Illiquid
CZK-CNY__1 week	1	0.02	120,619	1,856	Illiquid	Illiquid
CZK-DKK__1 month	1	0.02	247,930	3,814	Illiquid	Illiquid
CZK-DKK__3 months	2	0.03	937,770	14,427	Illiquid	Illiquid
CZK-DKK__6 months	9	0.14	4,150,788	63,858	Illiquid	Illiquid
CZK-DKK__1 year	2	0.03	1,071,737	16,488	Illiquid	Illiquid
CZK-EUR__<1 week	190	2.92	600,321,173	9,235,710	Illiquid	Illiquid
CZK-EUR__1 week	115	1.77	107,576,675	1,655,026	Illiquid	Illiquid
CZK-EUR__1 month	391	6.02	2,127,430,774	32,729,704	Liquid	Liquid
CZK-EUR__3 months	475	7.31	2,294,928,392	35,306,591	Liquid	Liquid
CZK-EUR__6 months	484	7.45	1,228,331,304	18,897,405	Liquid	Liquid
CZK-EUR__1 year	303	4.66	246,360,732	3,790,165	Illiquid	Illiquid
CZK-EUR__2 years	243	3.74	124,167,141	1,910,264	Illiquid	Illiquid
CZK-EUR__3 years	46	0.71	19,964,486	307,146	Illiquid	Illiquid
CZK-EUR__4 years	29	0.45	7,084,093	108,986	Illiquid	Illiquid
CZK-GBP__<1 week	11	0.17	855,582	13,163	Illiquid	Illiquid
CZK-GBP__1 week	20	0.31	2,695,654	41,472	Illiquid	Illiquid
CZK-GBP__1 month	16	0.25	19,688,525	302,900	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CZK-GBP__3 months	9	0.14	13,920,609	214,163	Illiquid	Illiquid
CZK-GBP__6 months	10	0.15	2,809,325	43,220	Illiquid	Illiquid
CZK-GBP__1 year	7	0.11	8,761,205	134,788	Illiquid	Illiquid
CZK-GBP__2 years	13	0.20	51,209,753	787,842	Illiquid	Illiquid
CZK-GBP__3 years	24	0.37	96,352,000	1,482,338	Illiquid	Illiquid
CZK-HUF__<1 week	1	0.02	2,421,260	37,250	Illiquid	Illiquid
CZK-HUF__1 week	3	0.05	19,054,481	293,146	Illiquid	Illiquid
CZK-HUF__1 month	1	0.02	97,460	1,499	Illiquid	Illiquid
CZK-HUF__3 months	5	0.08	19,282,635	296,656	Illiquid	Illiquid
CZK-HUF__6 months	4	0.06	1,386,188	21,326	Illiquid	Illiquid
CZK-JPY__<1 week	1	0.02	181,777	2,797	Illiquid	Illiquid
CZK-JPY__1 week	1	0.02	85,096	1,309	Illiquid	Illiquid
CZK-JPY__1 month	4	0.06	113,442	1,745	Illiquid	Illiquid
CZK-JPY__3 months	4	0.06	791,033	12,170	Illiquid	Illiquid
CZK-JPY__6 months	2	0.03	123,158	1,895	Illiquid	Illiquid
CZK-JPY__2 years	1	0.02	339,711	5,226	Illiquid	Illiquid
CZK-NOK__1 month	2	0.03	54,931	845	Illiquid	Illiquid
CZK-NOK__3 months	1	0.02	41,929	645	Illiquid	Illiquid
CZK-NZD__6 months	4	0.06	569,722	8,765	Illiquid	Illiquid
CZK-PLN__<1 week	4	0.06	9,829	151	Illiquid	Illiquid
CZK-PLN__1 week	8	0.12	320,957	4,938	Illiquid	Illiquid
CZK-PLN__1 month	22	0.34	8,703,365	133,898	Illiquid	Illiquid
CZK-PLN__3 months	8	0.12	3,835,107	59,002	Illiquid	Illiquid
CZK-PLN__6 months	5	0.08	333,971	5,138	Illiquid	Illiquid
CZK-PLN__1 year	1	0.02	23,878	367	Illiquid	Illiquid
CZK-RUB__1 week	1	0.02	61,194	941	Illiquid	Illiquid
CZK-RUB__3 months	1	0.02	305,971	4,707	Illiquid	Illiquid
CZK-RUB__1 year	1	0.02	101,990	1,569	Illiquid	Illiquid
CZK-SEK__1 year	2	0.03	2,673,936	41,137	Illiquid	Illiquid
CZK-SEK__2 years	3	0.05	3,342,420	51,422	Illiquid	Illiquid
CZK-USD__<1 week	325	5.00	152,055,366	2,339,313	Illiquid	Illiquid
CZK-USD__1 week	99	1.52	293,901,106	4,521,555	Illiquid	Illiquid
CZK-USD__1 month	142	2.18	133,046,040	2,046,862	Illiquid	Illiquid
CZK-USD__3 months	122	1.88	319,152,214	4,910,034	Illiquid	Illiquid
CZK-USD__6 months	93	1.43	166,654,529	2,563,916	Illiquid	Illiquid
CZK-USD__1 year	55	0.85	21,307,490	327,808	Illiquid	Illiquid
CZK-USD__2 years	78	1.20	3,636,598	55,948	Illiquid	Illiquid
CZK-USD__3 years	66	1.02	4,767,051	73,339	Illiquid	Illiquid
CZK-USD__4 years	8	0.12	18,884,301	290,528	Illiquid	Illiquid
CZK-USD__5 years	3	0.05	6,527,301	100,420	Illiquid	Illiquid
DKK-EUR__<1 week	273	4.20	1,053,219,856	16,203,382	Liquid	Liquid
DKK-EUR__1 week	211	3.25	1,878,101,009	28,893,862	Liquid	Liquid
DKK-EUR__1 month	320	4.92	3,225,145,705	49,617,626	Liquid	Liquid
DKK-EUR__3 months	226	3.48	7,165,389,605	110,236,763	Liquid	Liquid
DKK-EUR__6 months	75	1.15	1,552,979,488	23,891,992	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
DKK-EUR__1 year	40	0.62	1,531,825,729	23,566,550	Illiquid	Illiquid
DKK-EUR__2 years	9	0.14	219,169,609	3,371,840	Illiquid	Illiquid
DKK-EUR__3 years	2	0.03	28,478,951	438,138	Illiquid	Illiquid
DKK-EUR__6 years	1	0.02	1,000,000	15,385	Illiquid	Illiquid
DKK-EUR__8 years	1	0.02	100,000,000	1,538,462	Illiquid	Illiquid
DKK-GBP__<1 week	636	9.78	503,862,035	7,751,724	Illiquid	Illiquid
DKK-GBP__1 week	168	2.58	1,310,194,754	20,156,842	Liquid	Liquid
DKK-GBP__1 month	247	3.80	1,931,462,711	29,714,811	Liquid	Liquid
DKK-GBP__3 months	260	4.00	1,982,969,947	30,507,230	Liquid	Liquid
DKK-GBP__6 months	149	2.29	245,735,800	3,780,551	Illiquid	Illiquid
DKK-GBP__1 year	36	0.55	724,095,659	11,139,933	Illiquid	Illiquid
DKK-GBP__2 years	8	0.12	1,213,501	18,669	Illiquid	Illiquid
DKK-HKD__<1 week	1	0.02	46,753	719	Illiquid	Illiquid
DKK-HKD__1 month	5	0.08	17,198,880	264,598	Illiquid	Illiquid
DKK-HKD__3 months	8	0.12	11,492,631	176,810	Illiquid	Illiquid
DKK-HKD__6 months	4	0.06	251,962	3,876	Illiquid	Illiquid
DKK-HUF__1 week	1	0.02	9,746	150	Illiquid	Illiquid
DKK-HUF__3 months	2	0.03	1,039,569	15,993	Illiquid	Illiquid
DKK-HUF__6 months	29	0.45	21,826,721	335,796	Illiquid	Illiquid
DKK-INR__1 year	1	0.02	903,335	13,897	Illiquid	Illiquid
DKK-ISK__1 month	2	0.03	641,706	9,872	Illiquid	Illiquid
DKK-ISK__3 months	12	0.18	780,315	12,005	Illiquid	Illiquid
DKK-ISK__6 months	1	0.02	77,005	1,185	Illiquid	Illiquid
DKK-JPY__<1 week	5	0.08	2,787,602	42,886	Illiquid	Illiquid
DKK-JPY__1 week	12	0.18	24,959,877	383,998	Illiquid	Illiquid
DKK-JPY__1 month	37	0.57	192,575,404	2,962,699	Illiquid	Illiquid
DKK-JPY__3 months	62	0.95	492,294,609	7,573,763	Illiquid	Illiquid
DKK-JPY__6 months	21	0.32	97,395,367	1,498,390	Illiquid	Illiquid
DKK-JPY__1 year	21	0.32	211,946,652	3,260,718	Illiquid	Illiquid
DKK-JPY__2 years	2	0.03	257,541	3,962	Illiquid	Illiquid
DKK-MXN__1 week	2	0.03	28,305	435	Illiquid	Illiquid
DKK-MXN__1 month	5	0.08	224,443	3,453	Illiquid	Illiquid
DKK-MXN__3 months	3	0.05	212,344	3,267	Illiquid	Illiquid
DKK-MXN__6 months	1	0.02	28,471	438	Illiquid	Illiquid
DKK-NOK__<1 week	15	0.23	85,697,009	1,318,416	Illiquid	Illiquid
DKK-NOK__1 week	26	0.40	11,378,481	175,054	Illiquid	Illiquid
DKK-NOK__1 month	132	2.03	220,992,042	3,399,878	Illiquid	Illiquid
DKK-NOK__3 months	182	2.80	465,832,561	7,166,655	Illiquid	Illiquid
DKK-NOK__6 months	189	2.91	40,236,281	619,020	Illiquid	Illiquid
DKK-NOK__1 year	49	0.75	113,296,418	1,743,022	Illiquid	Illiquid
DKK-NOK__2 years	3	0.05	1,789,799	27,535	Illiquid	Illiquid
DKK-NOK__3 years	1	0.02	279,447	4,299	Illiquid	Illiquid
DKK-NZD__<1 week	1	0.02	288,315	4,436	Illiquid	Illiquid
DKK-NZD__1 month	2	0.03	756,136	11,633	Illiquid	Illiquid
DKK-NZD__3 months	10	0.15	1,524,718	23,457	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
DKK-NZD_6 months	10	0.15	3,765,983	57,938	Illiquid	Illiquid
DKK-NZD_1 year	6	0.09	1,450,038	22,308	Illiquid	Illiquid
DKK-PLN_<1 week	11	0.17	521,221	8,019	Illiquid	Illiquid
DKK-PLN_1 week	26	0.40	1,335,098	20,540	Illiquid	Illiquid
DKK-PLN_1 month	11	0.17	1,787,941	27,507	Illiquid	Illiquid
DKK-PLN_3 months	12	0.18	3,583,014	55,123	Illiquid	Illiquid
DKK-PLN_6 months	8	0.12	3,844,213	59,142	Illiquid	Illiquid
DKK-PLN_1 year	4	0.06	1,469,075	22,601	Illiquid	Illiquid
DKK-RON_1 month	1	0.02	5,606	86	Illiquid	Illiquid
DKK-RON_3 months	1	0.02	3,845	59	Illiquid	Illiquid
DKK-RUB_1 week	2	0.03	532,390	8,191	Illiquid	Illiquid
DKK-SEK_<1 week	26	0.40	13,403,669	206,210	Illiquid	Illiquid
DKK-SEK_1 week	32	0.49	12,892,158	198,341	Illiquid	Illiquid
DKK-SEK_1 month	129	1.98	89,359,739	1,374,765	Illiquid	Illiquid
DKK-SEK_3 months	213	3.28	197,507,720	3,038,580	Illiquid	Illiquid
DKK-SEK_6 months	115	1.77	80,813,630	1,243,287	Illiquid	Illiquid
DKK-SEK_1 year	42	0.65	26,420,554	406,470	Illiquid	Illiquid
DKK-SEK_2 years	2	0.03	7,166,911	110,260	Illiquid	Illiquid
DKK-SEK_3 years	2	0.03	13,487,721	207,503	Illiquid	Illiquid
DKK-SEK_4 years	1	0.02	6,822,992	104,969	Illiquid	Illiquid
DKK-SGD_1 month	23	0.35	218,638	3,364	Illiquid	Illiquid
DKK-SGD_3 months	8	0.12	565,631	8,702	Illiquid	Illiquid
DKK-SGD_6 months	3	0.05	672,938	10,353	Illiquid	Illiquid
DKK-THB_3 months	2	0.03	49,213	757	Illiquid	Illiquid
DKK-THB_6 months	4	0.06	98,427	1,514	Illiquid	Illiquid
DKK-TRY_<1 week	2	0.03	202,776	3,120	Illiquid	Illiquid
DKK-TRY_1 week	3	0.05	1,430,760	22,012	Illiquid	Illiquid
DKK-TRY_1 month	14	0.22	2,297,318	35,343	Illiquid	Illiquid
DKK-TRY_3 months	71	1.09	24,900,687	383,087	Illiquid	Illiquid
DKK-TRY_6 months	113	1.74	9,953,418	153,130	Illiquid	Illiquid
DKK-TRY_1 year	13	0.20	3,315,275	51,004	Illiquid	Illiquid
DKK-TRY_2 years	4	0.06	722,434	11,114	Illiquid	Illiquid
DKK-USD_<1 week	1,457	22.42	862,714,102	13,272,525	Liquid	Liquid
DKK-USD_1 week	228	3.51	5,258,607,369	80,901,652	Liquid	Liquid
DKK-USD_1 month	954	14.68	9,488,026,419	145,969,637	Liquid	Liquid
DKK-USD_3 months	1,074	16.52	15,161,397,219	233,252,265	Liquid	Liquid
DKK-USD_6 months	877	13.49	6,132,619,031	94,347,985	Liquid	Liquid
DKK-USD_1 year	207	3.18	3,075,897,769	47,321,504	Liquid	Liquid
DKK-USD_2 years	21	0.32	83,386,391	1,282,868	Illiquid	Illiquid
DKK-USD_3 years	1	0.02	36,852	567	Illiquid	Illiquid
DKK-USD_4 years	25	0.38	1,168,818,771	17,981,827	Illiquid	Illiquid
DKK-ZAR_<1 week	2	0.03	192,034	2,954	Illiquid	Illiquid
DKK-ZAR_1 week	6	0.09	1,397,734	21,504	Illiquid	Illiquid
DKK-ZAR_1 month	10	0.15	1,671,382	25,714	Illiquid	Illiquid
DKK-ZAR_3 months	62	0.95	16,028,698	246,595	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
DKK-ZAR_6 months	16	0.25	13,571,154	208,787	Illiquid	Illiquid
DKK-ZAR_1 year	7	0.11	980,745	15,088	Illiquid	Illiquid
DKK-ZAR_2 years	4	0.06	377,210	5,803	Illiquid	Illiquid
EUR-AED_<1 week	10	0.15	379,711	5,842	Illiquid	Illiquid
EUR-AED_1 week	8	0.12	1,312,184	20,187	Illiquid	Illiquid
EUR-AED_1 month	6	0.09	3,082,949	47,430	Illiquid	Illiquid
EUR-AED_3 months	7	0.11	1,514,040	23,293	Illiquid	Illiquid
EUR-AED_6 months	10	0.15	210,541	3,239	Illiquid	Illiquid
EUR-AED_1 year	45	0.69	1,032,280	15,881	Illiquid	Illiquid
EUR-AED_2 years	8	0.12	601,679	9,257	Illiquid	Illiquid
EUR-ARS_<1 week	6	0.09	112,851,479	1,736,177	Illiquid	Illiquid
EUR-ARS_1 month	5	0.08	38,815,526	597,162	Illiquid	Illiquid
EUR-ARS_3 months	210	3.23	190,899,102	2,936,909	Illiquid	Illiquid
EUR-ARS_6 months	1	0.02	74,418	1,145	Illiquid	Illiquid
EUR-ARS_2 years	1	0.02	20,474	315	Illiquid	Illiquid
EUR-AUD_6 months	2	0.03	2,000,000	30,769	Illiquid	Illiquid
EUR-BGN_1 week	1	0.02	664,775	10,227	Illiquid	Illiquid
EUR-BGN_3 months	1	0.02	765,697	11,780	Illiquid	Illiquid
EUR-BGN_6 months	3	0.05	16,408,804	252,443	Illiquid	Illiquid
EUR-BGN_1 year	1	0.02	8,611,906	132,491	Illiquid	Illiquid
EUR-BHD_1 month	1	0.02	708,778	10,904	Illiquid	Illiquid
EUR-CHF_1 week	2	0.03	250,000	3,846	Illiquid	Illiquid
EUR-CHF_3 months	1	0.02	750,000	11,538	Illiquid	Illiquid
EUR-CNH_<1 week	3	0.05	11,738,005	180,585	Illiquid	Illiquid
EUR-CNH_1 week	14	0.22	20,572,394	316,498	Illiquid	Illiquid
EUR-CNH_1 month	13	0.20	69,320,448	1,066,468	Illiquid	Illiquid
EUR-CNH_3 months	18	0.28	21,611,456	332,484	Illiquid	Illiquid
EUR-CNH_6 months	378	5.82	42,596,020	655,323	Illiquid	Illiquid
EUR-CNH_1 year	9	0.14	11,524,427	177,299	Illiquid	Illiquid
EUR-CNH_2 years	14	0.22	31,420,502	483,392	Illiquid	Illiquid
EUR-CSK_6 months	1	0.02	7,439,825	114,459	Illiquid	Illiquid
EUR-GBP_<1 week	250,900	3,860.00	24,480,182,826	376,618,197	Liquid	Liquid
EUR-GBP_1 week	6,214	95.60	15,198,705,035	233,826,231	Liquid	Liquid
EUR-GBP_1 month	20,089	309.06	26,560,558,567	408,623,978	Liquid	Liquid
EUR-GBP_3 months	3,721	57.25	36,531,814,545	562,027,916	Liquid	Liquid
EUR-GBP_6 months	11,103	170.82	10,738,192,823	165,202,967	Liquid	Liquid
EUR-GBP_1 year	2,452	37.72	2,127,024,427	32,723,453	Liquid	Liquid
EUR-GBP_2 years	317	4.88	904,240,063	13,911,386	Liquid	Liquid
EUR-GBP_3 years	66	1.02	732,595,705	11,270,703	Liquid	Liquid
EUR-GBP_4 years	5	0.08	71,596,574	1,101,486	Illiquid	Illiquid
EUR-HKD_<1 week	1,945	29.92	132,807,863	2,043,198	Illiquid	Illiquid
EUR-HKD_1 week	174	2.68	404,127,556	6,217,347	Illiquid	Illiquid
EUR-HKD_1 month	277	4.26	583,357,460	8,974,730	Illiquid	Illiquid
EUR-HKD_3 months	237	3.65	892,677,719	13,733,503	Liquid	Illiquid
EUR-HKD_6 months	143	2.20	154,032,812	2,369,736	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-HKD_1 year	41	0.63	8,771,651	134,948	Illiquid	Illiquid
EUR-HKD_2 years	9	0.14	773,324	11,897	Illiquid	Illiquid
EUR-HRK_<1 week	1	0.02	15,181	234	Illiquid	Illiquid
EUR-HRK_1 week	2	0.03	1,164,069	17,909	Illiquid	Illiquid
EUR-HRK_3 months	6	0.09	10,255,406	157,775	Illiquid	Illiquid
EUR-HRK_6 months	15	0.23	20,396,050	313,785	Illiquid	Illiquid
EUR-HRK_1 year	3	0.05	366,766	5,643	Illiquid	Illiquid
EUR-HRK_2 years	1	0.02	7,023,163	108,049	Illiquid	Illiquid
EUR-HUF_<1 week	3,565	54.85	42,571,647,432	654,948,422	Liquid	Liquid
EUR-HUF_1 week	295	4.54	22,651,390,216	348,482,926	Liquid	Liquid
EUR-HUF_1 month	1,602	24.65	30,492,998,188	469,123,049	Liquid	Liquid
EUR-HUF_3 months	973	14.97	61,942,902,315	952,967,728	Liquid	Liquid
EUR-HUF_6 months	2,405	37.00	92,971,928,484	1,430,337,361	Liquid	Liquid
EUR-HUF_1 year	108	1.66	817,912,781	12,583,274	Liquid	Liquid
EUR-HUF_2 years	38	0.58	60,180,298	925,851	Illiquid	Illiquid
EUR-HUF_3 years	33	0.51	35,396,618	544,563	Illiquid	Illiquid
EUR-HUF_4 years	13	0.20	29,781,934	458,184	Illiquid	Illiquid
EUR-HUF_5 years	15	0.23	34,013,234	523,281	Illiquid	Illiquid
EUR-HUF_6 years	15	0.23	49,505,558	761,624	Illiquid	Illiquid
EUR-IDR_<1 week	13	0.20	52,274,408	804,222	Illiquid	Illiquid
EUR-IDR_1 week	9	0.14	26,613,211	409,434	Illiquid	Illiquid
EUR-IDR_1 month	16	0.25	16,913,417	260,206	Illiquid	Illiquid
EUR-IDR_3 months	25	0.38	16,151,763,488	248,488,669	Illiquid	Illiquid
EUR-IDR_6 months	9	0.14	9,692,844,188	149,120,680	Illiquid	Illiquid
EUR-IDR_1 year	4	0.06	8,221,545	126,485	Illiquid	Illiquid
EUR-ILS_<1 week	2	0.03	251,550	3,870	Illiquid	Illiquid
EUR-ILS_1 week	5	0.08	443,008	6,816	Illiquid	Illiquid
EUR-ILS_1 month	8	0.12	829,313	12,759	Illiquid	Illiquid
EUR-ILS_3 months	5	0.08	613,863	9,444	Illiquid	Illiquid
EUR-ILS_6 months	2	0.03	396,480	6,100	Illiquid	Illiquid
EUR-ILS_1 year	1	0.02	536,137	8,248	Illiquid	Illiquid
EUR-INR_<1 week	7	0.11	21,607,567	332,424	Illiquid	Illiquid
EUR-INR_1 week	12	0.18	3,385,258,931	52,080,907	Illiquid	Illiquid
EUR-INR_1 month	83	1.28	123,275,812	1,896,551	Illiquid	Illiquid
EUR-INR_3 months	91	1.40	3,999,654,290	61,533,143	Liquid	Illiquid
EUR-INR_6 months	14	0.22	89,919,483	1,383,377	Illiquid	Illiquid
EUR-INR_1 year	23	0.35	87,812,420	1,350,960	Illiquid	Illiquid
EUR-INR_2 years	20	0.31	104,705,139	1,610,848	Illiquid	Illiquid
EUR-INR_3 years	10	0.15	110,437,262	1,699,035	Illiquid	Illiquid
EUR-JPY_<1 week	805,128	12,386.58	149,585,387,937	2,301,313,661	Liquid	Liquid
EUR-JPY_1 week	9,288	142.89	36,222,421,807	557,268,028	Liquid	Liquid
EUR-JPY_1 month	53,168	817.97	12,440,730,151	191,395,848	Liquid	Liquid
EUR-JPY_3 months	1,983	30.51	13,871,707,398	213,410,883	Liquid	Liquid
EUR-JPY_6 months	23,467	361.03	271,370,378,198	4,174,928,895	Liquid	Liquid
EUR-JPY_1 year	7,442	114.49	553,786,066	8,519,786	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-JPY_2 years	88	1.35	100,136,245	1,540,558	Illiquid	Illiquid
EUR-JPY_91 years	1	0.02	35,476,901	545,798	Illiquid	Illiquid
EUR-KGS_3 years	3	0.05	4,405,766	67,781	Illiquid	Illiquid
EUR-KRW_<1 week	21	0.32	162,044,710	2,492,996	Illiquid	Illiquid
EUR-KRW_1 week	21	0.32	101,197,312	1,556,882	Illiquid	Illiquid
EUR-KRW_1 month	101	1.55	59,757,274	919,343	Illiquid	Illiquid
EUR-KRW_3 months	142	2.18	408,065,504	6,277,931	Illiquid	Illiquid
EUR-KRW_6 months	20	0.31	65,734,876	1,011,306	Illiquid	Illiquid
EUR-KRW_1 year	29	0.45	84,847,841	1,305,351	Illiquid	Illiquid
EUR-KRW_2 years	84	1.29	385,247,594	5,926,886	Illiquid	Illiquid
EUR-KRW_3 years	10	0.15	69,308,560	1,066,286	Illiquid	Illiquid
EUR-KRW_4 years	2	0.03	13,861,712	213,257	Illiquid	Illiquid
EUR-KZT_1 month	1	0.02	4,700,000	72,308	Illiquid	Illiquid
EUR-KZT_3 months	1	0.02	3,100,000	47,692	Illiquid	Illiquid
EUR-LTL_<1 week	3	0.05	494,917	7,614	Illiquid	Illiquid
EUR-LTL_1 week	2	0.03	631,510	9,716	Illiquid	Illiquid
EUR-LTL_1 month	2	0.03	5,847,121	89,956	Illiquid	Illiquid
EUR-LTL_6 months	1	0.02	20,000,000	307,692	Illiquid	Illiquid
EUR-MAD_1 week	1	0.02	15,105	232	Illiquid	Illiquid
EUR-MAD_3 months	1	0.02	1,492,137	22,956	Illiquid	Illiquid
EUR-MAD_6 months	4	0.06	1,525,670	23,472	Illiquid	Illiquid
EUR-MAD_1 year	10	0.15	1,539,491	23,684	Illiquid	Illiquid
EUR-MAD_2 years	6	0.09	1,560,937	24,014	Illiquid	Illiquid
EUR-MXN_<1 week	1,767	27.18	57,067,907	877,968	Illiquid	Illiquid
EUR-MXN_1 week	38	0.58	74,115,912	1,140,245	Illiquid	Illiquid
EUR-MXN_1 month	158	2.43	345,147,363	5,309,959	Illiquid	Illiquid
EUR-MXN_3 months	182	2.80	349,661,169	5,379,403	Illiquid	Illiquid
EUR-MXN_6 months	144	2.22	218,553,427	3,362,360	Illiquid	Illiquid
EUR-MXN_1 year	27	0.42	106,551,396	1,639,252	Illiquid	Illiquid
EUR-MXN_2 years	14	0.22	41,874,194	644,218	Illiquid	Illiquid
EUR-MXN_3 years	1	0.02	1,959,862	30,152	Illiquid	Illiquid
EUR-MYR_<1 week	12	0.18	110,120,909	1,694,168	Illiquid	Illiquid
EUR-MYR_1 week	11	0.17	46,012,244	707,881	Illiquid	Illiquid
EUR-MYR_1 month	33	0.51	26,767,900	411,814	Illiquid	Illiquid
EUR-MYR_3 months	41	0.63	173,190,233	2,664,465	Illiquid	Illiquid
EUR-MYR_6 months	14	0.22	23,021,374	354,175	Illiquid	Illiquid
EUR-MYR_1 year	8	0.12	13,037,094	200,571	Illiquid	Illiquid
EUR-MYR_2 years	8	0.12	1,794,454	27,607	Illiquid	Illiquid
EUR-NGN_1 week	4	0.06	8,532,450	131,268	Illiquid	Illiquid
EUR-NGN_3 months	5	0.08	9,832,270	151,266	Illiquid	Illiquid
EUR-NOK_<1 week	2,487	38.26	3,599,346,913	55,374,568	Liquid	Liquid
EUR-NOK_1 week	360	5.54	1,041,643,959	16,025,292	Liquid	Liquid
EUR-NOK_1 month	724	11.14	1,589,855,716	24,459,319	Liquid	Liquid
EUR-NOK_3 months	567	8.72	2,193,469,373	33,745,683	Liquid	Liquid
EUR-NOK_6 months	2,854	43.91	4,215,809,505	64,858,608	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-NOK__1 year	72	1.11	234,852,657	3,613,118	Illiquid	Illiquid
EUR-NOK__2 years	25	0.38	108,850,571	1,674,624	Illiquid	Illiquid
EUR-NOK__3 years	27	0.42	40,938,796	629,828	Illiquid	Illiquid
EUR-NOK__4 years	5	0.08	6,428,113	98,894	Illiquid	Illiquid
EUR-NZD__<1 week	19,967	307.18	292,563,640	4,500,979	Illiquid	Illiquid
EUR-NZD__1 week	2,905	44.69	41,334,300	635,912	Illiquid	Illiquid
EUR-NZD__1 month	9,765	150.23	61,745,287	949,927	Illiquid	Illiquid
EUR-NZD__3 months	516	7.94	262,606,416	4,040,099	Illiquid	Illiquid
EUR-NZD__6 months	3,731	57.40	161,031,356	2,477,405	Illiquid	Illiquid
EUR-NZD__1 year	576	8.86	6,601,611	101,563	Illiquid	Illiquid
EUR-NZD__2 years	19	0.29	3,278,612	50,440	Illiquid	Illiquid
EUR-OMR__2 years	2	0.03	573,013	8,816	Illiquid	Illiquid
EUR-PEN__<1 week	4	0.06	17,840,077	274,463	Illiquid	Illiquid
EUR-PEN__1 week	12	0.18	32,945,592	506,855	Illiquid	Illiquid
EUR-PEN__1 month	16	0.25	3,472,947	53,430	Illiquid	Illiquid
EUR-PEN__3 months	22	0.34	49,748,683	765,364	Illiquid	Illiquid
EUR-PEN__6 months	6	0.09	12,417,869	191,044	Illiquid	Illiquid
EUR-PHP__<1 week	4	0.06	12,076,145	185,787	Illiquid	Illiquid
EUR-PHP__1 week	8	0.12	13,675,230	210,388	Illiquid	Illiquid
EUR-PHP__1 month	13	0.20	28,827,700	443,503	Illiquid	Illiquid
EUR-PHP__3 months	31	0.48	37,056,817	570,105	Illiquid	Illiquid
EUR-PHP__6 months	5	0.08	5,142,166	79,110	Illiquid	Illiquid
EUR-PHP__1 year	5	0.08	2,703,498	41,592	Illiquid	Illiquid
EUR-PHP__2 years	6	0.09	954,914	14,691	Illiquid	Illiquid
EUR-PLN__<1 week	889	13.68	660,632,878	10,163,583	Liquid	Liquid
EUR-PLN__1 week	170	2.62	348,475,083	5,361,155	Illiquid	Liquid
EUR-PLN__1 month	399	6.14	880,408,027	13,544,739	Liquid	Liquid
EUR-PLN__3 months	356	5.48	995,286,221	15,312,096	Liquid	Liquid
EUR-PLN__6 months	1,257	19.34	1,323,345,574	20,359,163	Liquid	Liquid
EUR-PLN__1 year	187	2.88	228,838,946	3,520,599	Illiquid	Illiquid
EUR-PLN__2 years	132	2.03	152,088,506	2,339,823	Illiquid	Illiquid
EUR-PLN__3 years	67	1.03	22,617,051	347,955	Illiquid	Illiquid
EUR-QAR__1 week	1	0.02	500,000	7,692	Illiquid	Illiquid
EUR-QAR__1 month	1	0.02	5,115,210	78,696	Illiquid	Illiquid
EUR-QAR__3 months	1	0.02	5,114,089	78,678	Illiquid	Illiquid
EUR-QAR__6 months	1	0.02	1,532,894	23,583	Illiquid	Illiquid
EUR-QAR__1 year	5	0.08	7,781,445	119,715	Illiquid	Illiquid
EUR-QAR__2 years	7	0.11	9,927,682	152,734	Illiquid	Illiquid
EUR-RON__<1 week	37	0.57	255,454,641	3,930,071	Illiquid	Illiquid
EUR-RON__1 week	50	0.77	101,620,451	1,563,392	Illiquid	Illiquid
EUR-RON__1 month	46	0.71	180,934,972	2,783,615	Illiquid	Illiquid
EUR-RON__3 months	45	0.69	130,296,090	2,004,555	Illiquid	Illiquid
EUR-RON__6 months	45	0.69	84,184,994	1,295,154	Illiquid	Illiquid
EUR-RON__1 year	44	0.68	51,680,646	795,087	Illiquid	Illiquid
EUR-RON__2 years	11	0.17	62,449,715	960,765	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-RON_3 years	1	0.02	275,950	4,245	Illiquid	Illiquid
EUR-RSD_1 month	4	0.06	2,134,871	32,844	Illiquid	Illiquid
EUR-RSD_3 months	8	0.12	4,783,466	73,592	Illiquid	Illiquid
EUR-RUB_<1 week	1,459	22.45	282,094,297	4,339,912	Illiquid	Illiquid
EUR-RUB_1 week	74	1.14	123,530,197	1,900,465	Illiquid	Illiquid
EUR-RUB_1 month	118	1.82	278,280,398	4,281,237	Illiquid	Illiquid
EUR-RUB_3 months	165	2.54	540,510,061	8,315,539	Illiquid	Illiquid
EUR-RUB_6 months	707	10.88	1,498,405,920	23,052,399	Liquid	Illiquid
EUR-RUB_1 year	88	1.35	195,163,402	3,002,514	Illiquid	Illiquid
EUR-RUB_2 years	12	0.18	27,062,504	416,346	Illiquid	Illiquid
EUR-RUB_3 years	1	0.02	742,847	11,428	Illiquid	Illiquid
EUR-SAR_1 week	2	0.03	856,119	13,171	Illiquid	Illiquid
EUR-SAR_1 month	1	0.02	3,265,344	50,236	Illiquid	Illiquid
EUR-SAR_6 months	3	0.05	1,948,076	29,970	Illiquid	Illiquid
EUR-SEK_<1 week	2,631	40.48	6,821,267,221	104,942,573	Liquid	Liquid
EUR-SEK_1 week	511	7.86	1,531,678,876	23,564,290	Liquid	Liquid
EUR-SEK_1 month	920	14.15	3,241,818,064	49,874,124	Liquid	Liquid
EUR-SEK_3 months	547	8.42	3,409,646,328	52,456,097	Liquid	Liquid
EUR-SEK_6 months	3,076	47.32	3,278,941,599	50,445,255	Liquid	Liquid
EUR-SEK_1 year	95	1.46	268,657,469	4,133,192	Illiquid	Illiquid
EUR-SEK_2 years	33	0.51	64,083,649	985,902	Illiquid	Illiquid
EUR-SEK_3 years	8	0.12	26,595,396	409,160	Illiquid	Illiquid
EUR-SEK_4 years	14	0.22	112,243,222	1,726,819	Illiquid	Illiquid
EUR-SGD_<1 week	673	10.35	74,841,928	1,151,414	Illiquid	Illiquid
EUR-SGD_1 week	94	1.45	453,566,757	6,977,950	Illiquid	Illiquid
EUR-SGD_1 month	207	3.18	189,436,401	2,914,406	Illiquid	Illiquid
EUR-SGD_3 months	228	3.51	637,194,487	9,802,992	Illiquid	Illiquid
EUR-SGD_6 months	149	2.29	45,054,453	693,145	Illiquid	Illiquid
EUR-SGD_1 year	22	0.34	11,249,579	173,070	Illiquid	Illiquid
EUR-SGD_2 years	50	0.77	62,262,030	957,877	Illiquid	Illiquid
EUR-SGD_3 years	9	0.14	14,928,884	229,675	Illiquid	Illiquid
EUR-THB_<1 week	3	0.05	606,385	9,329	Illiquid	Illiquid
EUR-THB_1 week	11	0.17	11,384,162	175,141	Illiquid	Illiquid
EUR-THB_1 month	36	0.55	17,970,856	276,475	Illiquid	Illiquid
EUR-THB_3 months	36	0.55	142,397,306	2,190,728	Illiquid	Illiquid
EUR-THB_6 months	13	0.20	6,141,569	94,486	Illiquid	Illiquid
EUR-THB_1 year	34	0.52	10,811,868	166,336	Illiquid	Illiquid
EUR-THB_2 years	10	0.15	7,555,522	116,239	Illiquid	Illiquid
EUR-TND_1 week	1	0.02	118,183	1,818	Illiquid	Illiquid
EUR-TND_3 months	2	0.03	94,570	1,455	Illiquid	Illiquid
EUR-TND_6 months	7	0.11	252,264	3,881	Illiquid	Illiquid
EUR-TND_1 year	38	0.58	813,953	12,522	Illiquid	Illiquid
EUR-TND_2 years	2	0.03	132,093	2,032	Illiquid	Illiquid
EUR-TRY_<1 week	6,678	102.74	306,346,038	4,713,016	Illiquid	Illiquid
EUR-TRY_1 week	400	6.15	58,087,486	893,654	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-TRY__1 month	932	14.34	348,011,566	5,354,024	Illiquid	Illiquid
EUR-TRY__3 months	316	4.86	352,040,677	5,416,010	Illiquid	Illiquid
EUR-TRY__6 months	2,386	36.71	649,059,032	9,985,524	Illiquid	Illiquid
EUR-TRY__1 year	134	2.06	100,164,716	1,540,996	Illiquid	Illiquid
EUR-TRY__2 years	46	0.71	149,665,811	2,302,551	Illiquid	Illiquid
EUR-TRY__3 years	5	0.08	50,100,032	770,770	Illiquid	Illiquid
EUR-TRY__4 years	2	0.03	10,721,832	164,951	Illiquid	Illiquid
EUR-TWD__<1 week	9	0.14	88,287,808	1,358,274	Illiquid	Illiquid
EUR-TWD__1 week	8	0.12	55,361,635	851,717	Illiquid	Illiquid
EUR-TWD__1 month	82	1.26	26,820,576	412,624	Illiquid	Illiquid
EUR-TWD__3 months	74	1.14	184,076,563	2,831,947	Illiquid	Illiquid
EUR-TWD__6 months	4	0.06	1,077,200	16,572	Illiquid	Illiquid
EUR-TWD__1 year	8	0.12	5,511,657	84,795	Illiquid	Illiquid
EUR-TWD__2 years	16	0.25	3,956,864	60,875	Illiquid	Illiquid
EUR-UAH__3 months	2	0.03	2,533,023	38,970	Illiquid	Illiquid
EUR-UAH__6 months	3	0.05	2,221,878	34,183	Illiquid	Illiquid
EUR-UAH__1 year	1	0.02	1,714,042	26,370	Illiquid	Illiquid
EUR-USD__<1 week	4,223,549	64,977.68	237,124,504,826	3,648,069,305	Liquid	Liquid
EUR-USD__1 week	110,444	1,699.14	41,474,945,129	638,076,079	Liquid	Liquid
EUR-USD__1 month	374,099	5,755.37	88,042,452,416	1,354,499,268	Liquid	Liquid
EUR-USD__3 months	18,751	288.48	76,874,134,272	1,182,678,989	Liquid	Liquid
EUR-USD__6 months	135,152	2,079.26	41,996,183,156	646,095,125	Liquid	Liquid
EUR-USD__1 year	38,846	597.63	6,167,462,676	94,884,041	Liquid	Liquid
EUR-USD__2 years	1,155	17.77	2,146,621,754	33,024,950	Liquid	Liquid
EUR-USD__3 years	172	2.65	1,079,598,438	16,609,207	Liquid	Liquid
EUR-USD__4 years	31	0.48	110,962,384	1,707,114	Illiquid	Illiquid
EUR-USD__5 years	8	0.12	32,801,453	504,638	Illiquid	Illiquid
EUR-USD__6 years	9	0.14	104,657,169	1,610,110	Illiquid	Illiquid
EUR-USD__7 years	17	0.26	30,379,334	467,374	Illiquid	Illiquid
EUR-USD__8 years	1	0.02	1,000,000	15,385	Illiquid	Illiquid
EUR-USD__7991 years	4	0.06	477,914	7,353	Illiquid	Illiquid
EUR-UYU__6 months	1	0.02	84,072,583	1,293,424	Illiquid	Illiquid
EUR-XAU__<1 week	1	0.02	2,451,091	37,709	Illiquid	Illiquid
EUR-XAU__1 month	2	0.03	882,162,621	13,571,733	Illiquid	Illiquid
EUR-XAU__6 months	1,628	25.05	118,138,842,412	1,817,520,652	Liquid	Illiquid
EUR-XOF__3 years	1	0.02	2,175,000	33,462	Illiquid	Illiquid
EUR-ZAR__<1 week	1,214	18.68	36,656,457	563,945	Illiquid	Illiquid
EUR-ZAR__1 week	97	1.49	44,395,616	683,009	Illiquid	Illiquid
EUR-ZAR__1 month	184	2.83	286,216,913	4,403,337	Illiquid	Illiquid
EUR-ZAR__3 months	179	2.75	388,574,539	5,978,070	Illiquid	Illiquid
EUR-ZAR__6 months	402	6.18	229,591,336	3,532,174	Illiquid	Illiquid
EUR-ZAR__1 year	61	0.94	8,265,204	127,157	Illiquid	Illiquid
EUR-ZAR__2 years	46	0.71	11,396,336	175,328	Illiquid	Illiquid
GBP-AED__1 week	5	0.08	5,742,257	88,342	Illiquid	Illiquid
GBP-AED__1 month	6	0.09	1,866,473	28,715	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-AED_3 months	2	0.03	1,919,075	29,524	Illiquid	Illiquid
GBP-BGN_<1 week	459	7.06	1,348,200	20,742	Illiquid	Illiquid
GBP-BRL_<1 week	8	0.12	49,870,827	767,243	Illiquid	Illiquid
GBP-BRL_1 week	7	0.11	12,885,243	198,235	Illiquid	Illiquid
GBP-BRL_1 month	34	0.52	19,423,769	298,827	Illiquid	Illiquid
GBP-BRL_3 months	19	0.29	67,228,972	1,034,292	Illiquid	Illiquid
GBP-BRL_6 months	3	0.05	8,515,909	131,014	Illiquid	Illiquid
GBP-CAD_2 years	6	0.09	25,629,147	394,295	Illiquid	Illiquid
GBP-CHF_1 month	4	0.06	18,272,045	281,108	Illiquid	Illiquid
GBP-CHF_3 months	4	0.06	18,281,234	281,250	Illiquid	Illiquid
GBP-CLP_<1 week	6	0.09	6,129,646	94,302	Illiquid	Illiquid
GBP-CLP_1 week	3	0.05	4,821,596	74,178	Illiquid	Illiquid
GBP-CLP_1 month	8	0.12	1,038,179	15,972	Illiquid	Illiquid
GBP-CLP_3 months	9	0.14	10,937,927	168,276	Illiquid	Illiquid
GBP-CLP_6 months	1	0.02	1,260,669	19,395	Illiquid	Illiquid
GBP-CNH_1 month	2	0.03	208,208	3,203	Illiquid	Illiquid
GBP-CNH_3 months	2	0.03	243,649	3,748	Illiquid	Illiquid
GBP-CNY_<1 week	5	0.08	97,379,646	1,498,148	Illiquid	Illiquid
GBP-CNY_1 week	11	0.17	19,280,005	296,615	Illiquid	Illiquid
GBP-CNY_1 month	58	0.89	106,196,650	1,633,795	Illiquid	Illiquid
GBP-CNY_3 months	28	0.43	132,463,551	2,037,901	Illiquid	Illiquid
GBP-CNY_6 months	1	0.02	8,009,154	123,218	Illiquid	Illiquid
GBP-CNY_1 year	3	0.05	13,828,124	212,740	Illiquid	Illiquid
GBP-CNY_2 years	4	0.06	22,182,648	341,272	Illiquid	Illiquid
GBP-COP_<1 week	4	0.06	1,009,465	15,530	Illiquid	Illiquid
GBP-COP_1 week	1	0.02	2,907,333	44,728	Illiquid	Illiquid
GBP-COP_3 months	5	0.08	3,854,971	59,307	Illiquid	Illiquid
GBP-DKK_<1 week	2	0.03	1,532,132	23,571	Illiquid	Illiquid
GBP-DKK_6 months	2	0.03	2,782,478	42,807	Illiquid	Illiquid
GBP-DKK_1 year	4	0.06	5,660,848	87,090	Illiquid	Illiquid
GBP-DKK_2 years	4	0.06	5,795,237	89,157	Illiquid	Illiquid
GBP-EGP_3 months	2	0.03	5,398,980	83,061	Illiquid	Illiquid
GBP-HKD_<1 week	66	1.02	517,745,722	7,965,319	Illiquid	Illiquid
GBP-HKD_1 week	161	2.48	1,075,066,588	16,539,486	Liquid	Liquid
GBP-HKD_1 month	271	4.17	738,045,656	11,354,549	Liquid	Liquid
GBP-HKD_3 months	223	3.43	1,719,268,675	26,450,287	Liquid	Liquid
GBP-HKD_6 months	18	0.28	447,009,331	6,877,067	Illiquid	Illiquid
GBP-HKD_1 year	8	0.12	11,274,524	173,454	Illiquid	Illiquid
GBP-HKD_2 years	3	0.05	2,177,021	33,493	Illiquid	Illiquid
GBP-HUF_<1 week	186	2.86	3,547,865,364	54,582,544	Liquid	Liquid
GBP-HUF_1 week	23	0.35	1,789,746,424	27,534,560	Illiquid	Liquid
GBP-HUF_1 month	133	2.05	4,081,793,943	62,796,830	Liquid	Liquid
GBP-HUF_3 months	175	2.69	3,580,408,030	55,083,200	Liquid	Liquid
GBP-HUF_6 months	192	2.95	8,913,389,868	137,129,075	Liquid	Liquid
GBP-HUF_1 year	3	0.05	5,804,491	89,300	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-IDR <1 week	6	0.09	1,777,647	27,348	Illiquid	Illiquid
GBP-IDR 1 week	5	0.08	7,348,315	113,051	Illiquid	Illiquid
GBP-IDR 1 month	2	0.03	508,847	7,828	Illiquid	Illiquid
GBP-IDR 3 months	9	0.14	5,836,383	89,791	Illiquid	Illiquid
GBP-ILS <1 week	8	0.12	19,142,998	294,508	Illiquid	Illiquid
GBP-ILS 1 week	26	0.40	59,411,901	914,029	Illiquid	Illiquid
GBP-ILS 1 month	36	0.55	21,606,051	332,401	Illiquid	Illiquid
GBP-ILS 3 months	28	0.43	75,743,710	1,165,288	Illiquid	Illiquid
GBP-ILS 6 months	3	0.05	1,060,266	16,312	Illiquid	Illiquid
GBP-INR <1 week	6	0.09	60,518,954	931,061	Illiquid	Illiquid
GBP-INR 1 week	7	0.11	49,290,256	758,312	Illiquid	Illiquid
GBP-INR 1 month	67	1.03	167,590,644	2,578,318	Illiquid	Illiquid
GBP-INR 3 months	23	0.35	118,530,984	1,823,554	Illiquid	Illiquid
GBP-JPY <1 week	549,779	8,458.14	48,691,666,706	749,102,565	Liquid	Liquid
GBP-JPY 1 week	9,920	152.62	14,652,123,193	225,417,280	Liquid	Liquid
GBP-JPY 1 month	70,622	1,086.49	6,982,611,775	107,424,797	Liquid	Liquid
GBP-JPY 3 months	1,081	16.63	18,056,463,560	277,791,747	Liquid	Liquid
GBP-JPY 6 months	13,574	208.83	302,952,780,519	4,660,812,008	Liquid	Liquid
GBP-JPY 1 year	3,431	52.78	55,741,096	857,555	Illiquid	Illiquid
GBP-JPY 2 years	18	0.28	52,827,315	812,728	Illiquid	Illiquid
GBP-KRW <1 week	4	0.06	43,106,981	663,184	Illiquid	Illiquid
GBP-KRW 1 week	9	0.14	210,578,778	3,239,674	Illiquid	Illiquid
GBP-KRW 1 month	54	0.83	122,457,811	1,883,966	Illiquid	Illiquid
GBP-KRW 3 months	20	0.31	286,357,345	4,405,498	Illiquid	Illiquid
GBP-KRW 6 months	1	0.02	15,886,611	244,409	Illiquid	Illiquid
GBP-KRW 1 year	3	0.05	9,890,124	152,156	Illiquid	Illiquid
GBP-KZT <1 week	4	0.06	3,029,003	46,600	Illiquid	Illiquid
GBP-KZT 1 month	2	0.03	773,190	11,895	Illiquid	Illiquid
GBP-KZT 3 months	7	0.11	7,901,317	121,559	Illiquid	Illiquid
GBP-MAD 1 week	1	0.02	307,846	4,736	Illiquid	Illiquid
GBP-MXN <1 week	12	0.18	30,416,446	467,945	Illiquid	Illiquid
GBP-MXN 1 week	39	0.60	80,673,636	1,241,133	Illiquid	Illiquid
GBP-MXN 1 month	31	0.48	76,647,714	1,179,196	Illiquid	Illiquid
GBP-MXN 3 months	27	0.42	131,111,974	2,017,107	Illiquid	Illiquid
GBP-MXN 6 months	8	0.12	14,688,596	225,978	Illiquid	Illiquid
GBP-MYR <1 week	9	0.14	35,444,564	545,301	Illiquid	Illiquid
GBP-MYR 1 week	7	0.11	3,344,200	51,449	Illiquid	Illiquid
GBP-MYR 1 month	35	0.54	35,484,226	545,911	Illiquid	Illiquid
GBP-MYR 3 months	14	0.22	129,764,755	1,996,381	Illiquid	Illiquid
GBP-MYR 6 months	1	0.02	46,776,583	719,640	Illiquid	Illiquid
GBP-MYR 1 year	3	0.05	102,462,992	1,576,354	Illiquid	Illiquid
GBP-NGN <1 week	4	0.06	1,881,398	28,945	Illiquid	Illiquid
GBP-NGN 3 months	4	0.06	1,881,398	28,945	Illiquid	Illiquid
GBP-NOK <1 week	939	14.45	86,034,815	1,323,613	Illiquid	Illiquid
GBP-NOK 1 week	129	1.98	273,569,257	4,208,758	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-NOK__1 month	126	1.94	506,032,639	7,785,118	Illiquid	Illiquid
GBP-NOK__3 months	122	1.88	873,280,053	13,435,078	Liquid	Liquid
GBP-NOK__6 months	696	10.71	992,476,612	15,268,871	Liquid	Liquid
GBP-NOK__1 year	3	0.05	12,516,056	192,555	Illiquid	Illiquid
GBP-NOK__2 years	1	0.02	242,700	3,734	Illiquid	Illiquid
GBP-NZD__<1 week	21,531	331.25	504,709,949	7,764,768	Illiquid	Illiquid
GBP-NZD__1 week	2,966	45.63	255,870,943	3,936,476	Illiquid	Illiquid
GBP-NZD__1 month	20,628	317.35	218,254,763	3,357,766	Illiquid	Illiquid
GBP-NZD__3 months	414	6.37	211,944,017	3,260,677	Illiquid	Illiquid
GBP-NZD__6 months	3,214	49.45	386,170,953	5,941,092	Illiquid	Illiquid
GBP-NZD__1 year	785	12.08	35,885,119	552,079	Illiquid	Illiquid
GBP-NZD__2 years	5	0.08	18,447,646	283,810	Illiquid	Illiquid
GBP-PEN__<1 week	4	0.06	2,193,527	33,747	Illiquid	Illiquid
GBP-PEN__1 week	1	0.02	671,638	10,333	Illiquid	Illiquid
GBP-PEN__3 months	5	0.08	2,863,245	44,050	Illiquid	Illiquid
GBP-PHP__<1 week	8	0.12	5,908,571	90,901	Illiquid	Illiquid
GBP-PHP__1 week	6	0.09	4,481,359	68,944	Illiquid	Illiquid
GBP-PHP__3 months	4	0.06	5,717,981	87,969	Illiquid	Illiquid
GBP-PKR__1 week	1	0.02	1,748,595	26,901	Illiquid	Illiquid
GBP-PLN__<1 week	1,923	29.58	137,955,134	2,122,387	Illiquid	Illiquid
GBP-PLN__1 week	54	0.83	45,659,051	702,447	Illiquid	Illiquid
GBP-PLN__1 month	25	0.38	17,633,546	271,285	Illiquid	Illiquid
GBP-PLN__3 months	43	0.66	38,181,348	587,405	Illiquid	Illiquid
GBP-PLN__6 months	570	8.77	205,211,860	3,157,106	Illiquid	Illiquid
GBP-PLN__1 year	20	0.31	14,540,978	223,707	Illiquid	Illiquid
GBP-PLN__2 years	16	0.25	4,240,931	65,245	Illiquid	Illiquid
GBP-QAR__1 month	2	0.03	749,253	11,527	Illiquid	Illiquid
GBP-QAR__3 months	2	0.03	749,253	11,527	Illiquid	Illiquid
GBP-RON__<1 week	2	0.03	504,817	7,766	Illiquid	Illiquid
GBP-RON__1 month	3	0.05	681,476	10,484	Illiquid	Illiquid
GBP-RON__3 months	3	0.05	848,341	13,051	Illiquid	Illiquid
GBP-RUB__<1 week	5	0.08	23,719,025	364,908	Illiquid	Illiquid
GBP-RUB__1 week	9	0.14	3,758,476	57,823	Illiquid	Illiquid
GBP-RUB__1 month	47	0.72	56,093,515	862,977	Illiquid	Illiquid
GBP-RUB__3 months	20	0.31	55,670,250	856,465	Illiquid	Illiquid
GBP-RUB__6 months	3	0.05	108,588	1,671	Illiquid	Illiquid
GBP-RUB__1 year	7	0.11	868,623	13,363	Illiquid	Illiquid
GBP-SAR__1 week	1	0.02	3,867,521	59,500	Illiquid	Illiquid
GBP-SAR__1 month	2	0.03	716,958	11,030	Illiquid	Illiquid
GBP-SAR__3 months	2	0.03	716,958	11,030	Illiquid	Illiquid
GBP-SEK__<1 week	931	14.32	278,191,785	4,279,874	Illiquid	Illiquid
GBP-SEK__1 week	235	3.62	760,771,584	11,704,178	Liquid	Liquid
GBP-SEK__1 month	282	4.34	531,527,257	8,177,342	Illiquid	Liquid
GBP-SEK__3 months	153	2.35	1,598,075,736	24,585,781	Liquid	Liquid
GBP-SEK__6 months	208	3.20	294,954,394	4,537,760	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-SEK__1 year	9	0.14	97,845,349	1,505,313	Illiquid	Illiquid
GBP-SEK__2 years	1	0.02	242,700	3,734	Illiquid	Illiquid
GBP-SGD__<1 week	797	12.26	245,141,259	3,771,404	Illiquid	Illiquid
GBP-SGD__1 week	154	2.37	395,548,049	6,085,355	Illiquid	Illiquid
GBP-SGD__1 month	121	1.86	130,097,964	2,001,507	Illiquid	Illiquid
GBP-SGD__3 months	132	2.03	573,956,611	8,830,102	Illiquid	Illiquid
GBP-SGD__6 months	162	2.49	47,084,434	724,376	Illiquid	Illiquid
GBP-SGD__1 year	2	0.03	4,104,926	63,153	Illiquid	Illiquid
GBP-THB__1 week	4	0.06	347,335	5,344	Illiquid	Illiquid
GBP-THB__1 month	24	0.37	10,145,174	156,080	Illiquid	Illiquid
GBP-THB__3 months	9	0.14	17,937,154	275,956	Illiquid	Illiquid
GBP-THB__6 months	1	0.02	28,355	436	Illiquid	Illiquid
GBP-THB__1 year	14	0.22	535,753	8,242	Illiquid	Illiquid
GBP-TRY__<1 week	1,418	21.82	11,854,513	182,377	Illiquid	Illiquid
GBP-TRY__1 week	12	0.18	15,895,374	244,544	Illiquid	Illiquid
GBP-TRY__1 month	25	0.38	36,407,602	560,117	Illiquid	Illiquid
GBP-TRY__3 months	16	0.25	22,165,045	341,001	Illiquid	Illiquid
GBP-TRY__6 months	239	3.68	67,789,697	1,042,918	Illiquid	Illiquid
GBP-TWD__<1 week	8	0.12	132,549,556	2,039,224	Illiquid	Illiquid
GBP-TWD__1 week	4	0.06	10,272,283	158,035	Illiquid	Illiquid
GBP-TWD__1 month	50	0.77	86,290,913	1,327,553	Illiquid	Illiquid
GBP-TWD__3 months	16	0.25	164,318,960	2,527,984	Illiquid	Illiquid
GBP-USD__<1 week	2,244,906	34,537.02	110,951,111,383	1,706,940,175	Liquid	Liquid
GBP-USD__1 week	23,551	362.32	34,163,649,105	525,594,602	Liquid	Liquid
GBP-USD__1 month	128,652	1,979.26	41,290,988,887	635,245,983	Liquid	Liquid
GBP-USD__3 months	6,476	99.63	75,009,004,904	1,153,984,691	Liquid	Liquid
GBP-USD__6 months	48,969	753.37	30,799,576,654	473,839,641	Liquid	Liquid
GBP-USD__1 year	22,717	349.49	3,666,806,520	56,412,408	Liquid	Liquid
GBP-USD__2 years	1,025	15.77	498,875,305	7,675,005	Illiquid	Illiquid
GBP-USD__3 years	57	0.88	118,095,975	1,816,861	Illiquid	Illiquid
GBP-USD__4 years	4	0.06	238,359,628	3,667,071	Illiquid	Illiquid
GBP-USD__8 years	2	0.03	7,029,173	108,141	Illiquid	Illiquid
GBP-ZAR__<1 week	563	8.66	16,747,653	257,656	Illiquid	Illiquid
GBP-ZAR__1 week	83	1.28	49,483,111	761,279	Illiquid	Illiquid
GBP-ZAR__1 month	91	1.40	131,447,224	2,022,265	Illiquid	Illiquid
GBP-ZAR__3 months	27	0.42	94,409,069	1,452,447	Illiquid	Illiquid
GBP-ZAR__6 months	136	2.09	153,628,145	2,363,510	Illiquid	Illiquid
GBP-ZAR__1 year	2	0.03	4,078,958	62,753	Illiquid	Illiquid
GBP-ZAR__2 years	1	0.02	222,428	3,422	Illiquid	Illiquid
HKD-JPY__<1 week	34	0.52	8,758,934	134,753	Illiquid	Illiquid
HKD-JPY__1 week	5	0.08	51,600,760	793,858	Illiquid	Illiquid
HKD-JPY__1 month	3	0.05	21,817,197	335,649	Illiquid	Illiquid
HKD-JPY__3 months	13	0.20	62,143,470	956,053	Illiquid	Illiquid
HKD-JPY__6 months	45	0.69	1,901,177	29,249	Illiquid	Illiquid
HKD-NOK__1 month	16	0.25	2,081,800	32,028	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
HKD-NOK__3 months	4	0.06	18,745,456	288,392	Illiquid	Illiquid
HKD-NZD__<1 week	11	0.17	589,668	9,072	Illiquid	Illiquid
HKD-NZD__1 week	14	0.22	697,274	10,727	Illiquid	Illiquid
HKD-NZD__6 months	4	0.06	193,253	2,973	Illiquid	Illiquid
HKD-PLN__<1 week	3	0.05	5,798	89	Illiquid	Illiquid
HKD-PLN__1 week	5	0.08	15,169	233	Illiquid	Illiquid
HKD-SEK__3 months	1	0.02	130,907	2,014	Illiquid	Illiquid
HKD-SEK__6 months	4	0.06	850,897	13,091	Illiquid	Illiquid
HKD-SEK__1 year	7	0.11	1,561,537	24,024	Illiquid	Illiquid
HKD-SGD__<1 week	121	1.86	6,472,618	99,579	Illiquid	Illiquid
HKD-SGD__1 week	32	0.49	1,274,275	19,604	Illiquid	Illiquid
HKD-SGD__1 month	30	0.46	95,191	1,464	Illiquid	Illiquid
HKD-SGD__3 months	61	0.94	415,169	6,387	Illiquid	Illiquid
HKD-SGD__6 months	2	0.03	2,119,627	32,610	Illiquid	Illiquid
HKD-TWD__1 month	1	0.02	309,779	4,766	Illiquid	Illiquid
HKD-TWD__1 year	1	0.02	3,429,550	52,762	Illiquid	Illiquid
HKD-TWD__2 years	1	0.02	3,418,695	52,595	Illiquid	Illiquid
HKD-USD__<1 week	817	12.57	890,131,983	13,694,338	Liquid	Illiquid
HKD-USD__1 week	430	6.62	528,158,960	8,125,522	Illiquid	Illiquid
HKD-USD__1 month	145	2.23	251,391,036	3,867,554	Illiquid	Illiquid
HKD-USD__3 months	226	3.48	738,382,438	11,359,730	Liquid	Illiquid
HKD-USD__6 months	183	2.82	332,651,712	5,117,719	Illiquid	Illiquid
HKD-USD__1 year	9	0.14	72,542,455	1,116,038	Illiquid	Illiquid
HKD-USD__2 years	2	0.03	20,306,516	312,408	Illiquid	Illiquid
HUF-JPY__1 week	4	0.06	785,210	12,080	Illiquid	Illiquid
HUF-JPY__1 month	5	0.08	785,210	12,080	Illiquid	Illiquid
HUF-JPY__3 months	6	0.09	2,696,244	41,481	Illiquid	Illiquid
HUF-JPY__6 months	274	4.22	5,617,655	86,425	Illiquid	Illiquid
HUF-JPY__1 year	4	0.06	807,454	12,422	Illiquid	Illiquid
HUF-NZD__<1 week	92	1.42	493,511	7,592	Illiquid	Illiquid
HUF-NZD__6 months	2	0.03	14,116,023	217,170	Illiquid	Illiquid
HUF-PLN__<1 week	8	0.12	650,467,028	10,007,185	Illiquid	Illiquid
HUF-PLN__1 month	13	0.20	56,386,369	867,483	Illiquid	Illiquid
HUF-PLN__3 months	20	0.31	1,003,044,142	15,431,448	Illiquid	Illiquid
HUF-PLN__6 months	8	0.12	24,563,307	377,897	Illiquid	Illiquid
HUF-PLN__2 years	1	0.02	262,461,960	4,037,876	Illiquid	Illiquid
HUF-RON__3 months	2	0.03	1,266,922	19,491	Illiquid	Illiquid
HUF-TRY__<1 week	1	0.02	203,445,342	3,129,928	Illiquid	Illiquid
HUF-USD__<1 week	1,798	27.66	14,114,478,858	217,145,829	Liquid	Liquid
HUF-USD__1 week	80	1.23	6,335,488,203	97,469,049	Liquid	Liquid
HUF-USD__1 month	362	5.57	8,096,554,773	124,562,381	Liquid	Liquid
HUF-USD__3 months	357	5.49	15,790,885,153	242,936,695	Liquid	Liquid
HUF-USD__6 months	1,269	19.52	24,133,489,753	371,284,458	Liquid	Liquid
HUF-USD__1 year	4	0.06	5,149,878	79,229	Illiquid	Illiquid
HUF-USD__2 years	1	0.02	1,635,269	25,158	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
IDR-JPY_1 week	2	0.03	251,339	3,867	Illiquid	Illiquid
IDR-SEK_3 months	1	0.02	1,956,224	30,096	Illiquid	Illiquid
IDR-USD_<1 week	188	2.89	71,031,068,200	1,092,785,665	Liquid	Liquid
IDR-USD_1 week	171	2.63	58,968,023,272	907,200,358	Liquid	Liquid
IDR-USD_1 month	352	5.42	272,194,589,515	4,187,609,069	Liquid	Liquid
IDR-USD_3 months	1,301	20.02	730,052,795,004	11,231,581,462	Liquid	Liquid
IDR-USD_6 months	197	3.03	116,856,176,775	1,797,787,335	Liquid	Liquid
IDR-USD_1 year	50	0.77	165,416,340	2,544,867	Illiquid	Illiquid
IDR-USD_2 years	30	0.46	172,605,387	2,655,467	Illiquid	Illiquid
ILS-NOK_1 month	20	0.31	16,458,011	253,200	Illiquid	Illiquid
ILS-NOK_3 months	4	0.06	5,301,358	81,559	Illiquid	Illiquid
ILS-USD_<1 week	343	5.28	55,879,825	859,690	Illiquid	Illiquid
ILS-USD_1 week	11	0.17	8,006,181	123,172	Illiquid	Illiquid
ILS-USD_1 month	40	0.62	36,925,224	568,080	Illiquid	Illiquid
ILS-USD_3 months	56	0.86	49,691,556	764,485	Illiquid	Illiquid
ILS-USD_6 months	241	3.71	38,126,275	586,558	Illiquid	Illiquid
ILS-USD_1 year	211	3.25	5,923,317	91,128	Illiquid	Illiquid
ILS-USD_2 years	1	0.02	17,734	273	Illiquid	Illiquid
INR-JPY_1 week	1	0.02	21,468,242	330,281	Illiquid	Illiquid
INR-JPY_3 months	1	0.02	21,468,242	330,281	Illiquid	Illiquid
INR-NZD_3 months	4	0.06	3,653,560	56,209	Illiquid	Illiquid
INR-SEK_1 month	1	0.02	3,613,339	55,590	Illiquid	Illiquid
INR-SEK_3 months	1	0.02	4,729,861	72,767	Illiquid	Illiquid
INR-USD_<1 week	817	12.57	6,643,262,260	102,204,035	Liquid	Liquid
INR-USD_1 week	624	9.60	11,998,837,931	184,597,507	Liquid	Liquid
INR-USD_1 month	1,973	30.35	17,589,233,142	270,603,587	Liquid	Liquid
INR-USD_3 months	8,301	127.71	38,455,053,842	591,616,213	Liquid	Liquid
INR-USD_6 months	392	6.03	3,741,818,853	57,566,444	Liquid	Liquid
INR-USD_1 year	172	2.65	2,762,305,775	42,497,012	Liquid	Liquid
INR-USD_2 years	86	1.32	850,620,071	13,086,463	Liquid	Liquid
JPY-KRW_1 week	2	0.03	1,017,141	15,648	Illiquid	Illiquid
JPY-KRW_1 month	1	0.02	508,570	7,824	Illiquid	Illiquid
JPY-MXN_<1 week	283	4.35	1,424,049	21,908	Illiquid	Illiquid
JPY-MXN_1 week	13	0.20	9,807,840	150,890	Illiquid	Illiquid
JPY-MXN_1 month	121	1.86	18,578,090	285,817	Illiquid	Illiquid
JPY-MXN_3 months	47	0.72	807,969,740	12,430,304	Illiquid	Illiquid
JPY-MXN_6 months	118	1.82	7,075,773	108,858	Illiquid	Illiquid
JPY-MYR_1 week	2	0.03	5,910,178	90,926	Illiquid	Illiquid
JPY-MYR_1 month	4	0.06	5,878,074	90,432	Illiquid	Illiquid
JPY-MYR_3 months	6	0.09	11,800,687	181,549	Illiquid	Illiquid
JPY-NOK_<1 week	75	1.15	4,575,431	70,391	Illiquid	Illiquid
JPY-NOK_1 week	20	0.31	23,891,835	367,567	Illiquid	Illiquid
JPY-NOK_1 month	62	0.95	30,438,494	468,285	Illiquid	Illiquid
JPY-NOK_3 months	45	0.69	358,180,374	5,510,467	Illiquid	Illiquid
JPY-NOK_6 months	991	15.25	224,506,304	3,453,943	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-NOK__1 year	6	0.09	617,670	9,503	Illiquid	Illiquid
JPY-NZD__<1 week	22,005	338.54	6,647,083,671	102,262,826	Liquid	Liquid
JPY-NZD__1 week	609	9.37	1,229,717,234	18,918,727	Liquid	Liquid
JPY-NZD__1 month	2,434	37.45	155,461,604	2,391,717	Illiquid	Liquid
JPY-NZD__3 months	68	1.05	401,907,907	6,183,199	Illiquid	Liquid
JPY-NZD__6 months	3,659	56.29	5,253,658,335	80,825,513	Liquid	Liquid
JPY-NZD__1 year	566	8.71	17,763,672	273,287	Illiquid	Illiquid
JPY-NZD__2 years	4	0.06	3,733	57	Illiquid	Illiquid
JPY-PEN__1 week	1	0.02	22,470	346	Illiquid	Illiquid
JPY-PEN__3 months	1	0.02	46,435	714	Illiquid	Illiquid
JPY-PEN__6 months	1	0.02	22,209	342	Illiquid	Illiquid
JPY-PLN__<1 week	88	1.35	5,372,562	82,655	Illiquid	Illiquid
JPY-PLN__1 week	8	0.12	12,123,561	186,516	Illiquid	Illiquid
JPY-PLN__1 month	3	0.05	4,530,804	69,705	Illiquid	Illiquid
JPY-PLN__3 months	10	0.15	9,660,505	148,623	Illiquid	Illiquid
JPY-PLN__6 months	40	0.62	41,733,543	642,055	Illiquid	Illiquid
JPY-RUB__1 week	1	0.02	1,780,661	27,395	Illiquid	Illiquid
JPY-RUB__1 month	15	0.23	34,329	528	Illiquid	Illiquid
JPY-RUB__3 months	5	0.08	17,776,945	273,491	Illiquid	Illiquid
JPY-SAR__<1 week	2	0.03	12,349,717	189,996	Illiquid	Illiquid
JPY-SAR__1 week	16	0.25	113,823,129	1,751,125	Illiquid	Illiquid
JPY-SAR__1 month	2	0.03	8,464,722	130,226	Illiquid	Illiquid
JPY-SEK__<1 week	60	0.92	147,512	2,269	Illiquid	Illiquid
JPY-SEK__1 week	10	0.15	5,862,887	90,198	Illiquid	Illiquid
JPY-SEK__1 month	5	0.08	10,704,666	164,687	Illiquid	Illiquid
JPY-SEK__3 months	15	0.23	13,035,088	200,540	Illiquid	Illiquid
JPY-SEK__6 months	114	1.75	38,637,991	594,431	Illiquid	Illiquid
JPY-SEK__1 year	4	0.06	2,793,451	42,976	Illiquid	Illiquid
JPY-SGD__<1 week	818	12.58	36,669,097	564,140	Illiquid	Illiquid
JPY-SGD__1 week	20	0.31	49,975,857	768,859	Illiquid	Illiquid
JPY-SGD__1 month	34	0.52	12,473,399	191,898	Illiquid	Illiquid
JPY-SGD__3 months	82	1.26	38,785,122	596,694	Illiquid	Illiquid
JPY-SGD__6 months	129	1.98	305,177,175	4,695,033	Illiquid	Illiquid
JPY-THB__1 week	1	0.02	599,112	9,217	Illiquid	Illiquid
JPY-TRY__<1 week	140	2.15	1,201,787	18,489	Illiquid	Illiquid
JPY-TRY__1 week	12	0.18	396,194,246	6,095,296	Illiquid	Illiquid
JPY-TRY__1 month	114	1.75	125,937,821	1,937,505	Illiquid	Illiquid
JPY-TRY__3 months	49	0.75	1,212,211,641	18,649,410	Illiquid	Illiquid
JPY-TRY__6 months	2,243	34.51	1,750,940,715	26,937,549	Liquid	Illiquid
JPY-TWD__1 week	1	0.02	5,619,186	86,449	Illiquid	Illiquid
JPY-TWD__3 months	1	0.02	5,691,119	87,556	Illiquid	Illiquid
JPY-USD__<1 week	1,146,043	17,631.43	328,214,016,673	5,049,446,410	Liquid	Liquid
JPY-USD__1 week	11,791	181.40	86,724,333,498	1,334,220,515	Liquid	Liquid
JPY-USD__1 month	64,976	999.63	178,824,880,606	2,751,152,009	Liquid	Liquid
JPY-USD__3 months	2,336	35.94	52,837,247,017	812,880,723	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-USD__6 months	43,591	670.63	559,039,794,390	8,600,612,221	Liquid	Liquid
JPY-USD__1 year	6,189	95.22	640,806,260	9,858,558	Illiquid	Illiquid
JPY-USD__2 years	24	0.37	69,202,342	1,064,651	Illiquid	Illiquid
JPY-USD__3 years	1	0.02	6,237,001	95,954	Illiquid	Illiquid
JPY-USD__5 years	1	0.02	3,481,117	53,556	Illiquid	Illiquid
JPY-USD__6 years	1	0.02	3,689,598	56,763	Illiquid	Illiquid
JPY-ZAR__<1 week	373	5.74	699,415	10,760	Illiquid	Illiquid
JPY-ZAR__1 week	12	0.18	4,971,420	76,483	Illiquid	Illiquid
JPY-ZAR__1 month	110	1.69	18,688,876	287,521	Illiquid	Illiquid
JPY-ZAR__3 months	41	0.63	111,212,243	1,710,958	Illiquid	Illiquid
JPY-ZAR__6 months	585	9.00	286,848,944	4,413,061	Illiquid	Illiquid
KES-USD__<1 week	4	0.06	632,365	9,729	Illiquid	Illiquid
KES-USD__1 week	2	0.03	2,323,974	35,753	Illiquid	Illiquid
KES-USD__3 months	2	0.03	1,033,756	15,904	Illiquid	Illiquid
KES-USD__6 months	2	0.03	2,492,698	38,349	Illiquid	Illiquid
KRW-DKK__1 year	1	0.02	2,772,342	42,651	Illiquid	Illiquid
KRW-DKK__2 years	1	0.02	2,079,257	31,989	Illiquid	Illiquid
KRW-NOK__3 months	1	0.02	10,534,901	162,075	Illiquid	Illiquid
KRW-SEK__1 month	1	0.02	6,584,313	101,297	Illiquid	Illiquid
KRW-SEK__3 months	3	0.05	8,877,872	136,583	Illiquid	Illiquid
KRW-USD__<1 week	341	5.25	33,966,979,410	522,568,914	Liquid	Liquid
KRW-USD__1 week	391	6.02	51,903,695,650	798,518,395	Liquid	Liquid
KRW-USD__1 month	942	14.49	151,742,846,126	2,334,505,325	Liquid	Liquid
KRW-USD__3 months	3,437	52.88	681,867,474,799	10,490,268,843	Liquid	Liquid
KRW-USD__6 months	168	2.58	51,799,187,411	796,910,576	Liquid	Liquid
KRW-USD__1 year	55	0.85	76,953,262,928	1,183,896,353	Illiquid	Illiquid
KRW-USD__2 years	48	0.74	30,658,944,555	471,676,070	Illiquid	Illiquid
KRW-USD__3 years	1	0.02	938,292	14,435	Illiquid	Illiquid
KWD-SEK__<1 week	1	0.02	167,459	2,576	Illiquid	Illiquid
KZT-USD__<1 week	4	0.06	176,552,103	2,716,186	Illiquid	Illiquid
KZT-USD__3 months	5	0.08	4,623,410	71,129	Illiquid	Illiquid
KZT-USD__6 months	4	0.06	967,662	14,887	Illiquid	Illiquid
LTL-PLN__<1 week	8	0.12	66,690	1,026	Illiquid	Illiquid
LTL-PLN__1 week	6	0.09	39,398	606	Illiquid	Illiquid
LTL-PLN__1 month	21	0.32	229,821	3,536	Illiquid	Illiquid
LTL-PLN__3 months	2	0.03	810,258	12,466	Illiquid	Illiquid
LTL-SEK__<1 week	2	0.03	398,186	6,126	Illiquid	Illiquid
LTL-SEK__3 months	1	0.02	463,344	7,128	Illiquid	Illiquid
MAD-USD__<1 week	6	0.09	22,682,875	348,967	Illiquid	Illiquid
MAD-USD__1 week	1	0.02	362,616	5,579	Illiquid	Illiquid
MAD-USD__1 month	1	0.02	4,442,646	68,348	Illiquid	Illiquid
MAD-USD__6 months	2	0.03	23,809,104	366,294	Illiquid	Illiquid
MXN-NZD__1 week	1	0.02	35,069	540	Illiquid	Illiquid
MXN-NZD__3 months	2	0.03	115,505	1,777	Illiquid	Illiquid
MXN-NZD__6 months	9	0.14	975,144	15,002	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
MXN-USD <1 week	5,008	77.05	4,048,083,037	62,278,201	Liquid	Liquid
MXN-USD 1 week	270	4.15	851,790,894	13,104,475	Liquid	Liquid
MXN-USD 1 month	407	6.26	602,770,432	9,273,391	Illiquid	Liquid
MXN-USD 3 months	360	5.54	882,487,292	13,576,728	Liquid	Liquid
MXN-USD 6 months	1,044	16.06	1,777,814,627	27,350,994	Liquid	Liquid
MXN-USD 1 year	120	1.85	46,159,153	710,141	Illiquid	Illiquid
MXN-USD 2 years	31	0.48	1,724,201,324	26,526,174	Illiquid	Illiquid
MXN-USD 3 years	4	0.06	1,404,225	21,603	Illiquid	Illiquid
MYR-DKK 3 months	1	0.02	668,237	10,281	Illiquid	Illiquid
MYR-DKK 2 years	1	0.02	222,746	3,427	Illiquid	Illiquid
MYR-SEK 3 months	1	0.02	1,291,925	19,876	Illiquid	Illiquid
MYR-SGD 1 year	2	0.03	664,321	10,220	Illiquid	Illiquid
MYR-SGD 2 years	2	0.03	656,594	10,101	Illiquid	Illiquid
MYR-USD <1 week	239	3.68	1,353,768,005	20,827,200	Liquid	Liquid
MYR-USD 1 week	213	3.28	2,767,491,536	42,576,793	Liquid	Liquid
MYR-USD 1 month	474	7.29	3,777,340,763	58,112,935	Liquid	Liquid
MYR-USD 3 months	1,812	27.88	10,232,610,534	157,424,777	Liquid	Liquid
MYR-USD 6 months	86	1.32	642,730,216	9,888,157	Illiquid	Illiquid
MYR-USD 1 year	64	0.98	816,412,557	12,560,193	Illiquid	Illiquid
MYR-USD 2 years	29	0.45	183,529,402	2,823,529	Illiquid	Illiquid
NGN-USD <1 week	10	0.15	84,844,502	1,305,300	Illiquid	Illiquid
NGN-USD 1 week	3	0.05	8,898,144	136,895	Illiquid	Illiquid
NGN-USD 1 month	5	0.08	15,786,341	242,867	Illiquid	Illiquid
NGN-USD 3 months	12	0.18	19,062,182	293,264	Illiquid	Illiquid
NGN-USD 6 months	6	0.09	7,388,079	113,663	Illiquid	Illiquid
NOK-NZD <1 week	14	0.22	5,917,700	91,042	Illiquid	Illiquid
NOK-NZD 1 week	41	0.63	22,450,338	345,390	Illiquid	Illiquid
NOK-NZD 1 month	76	1.17	40,110,512	617,085	Illiquid	Illiquid
NOK-NZD 3 months	21	0.32	12,039,721	185,226	Illiquid	Illiquid
NOK-NZD 6 months	387	5.95	122,535,113	1,885,156	Illiquid	Illiquid
NOK-PLN <1 week	12	0.18	526,851	8,105	Illiquid	Illiquid
NOK-PLN 1 week	18	0.28	654,514	10,069	Illiquid	Illiquid
NOK-PLN 1 month	2	0.03	120,881	1,860	Illiquid	Illiquid
NOK-PLN 3 months	1	0.02	240,123	3,694	Illiquid	Illiquid
NOK-SEK <1 week	1,003	15.43	52,618,886	809,521	Illiquid	Illiquid
NOK-SEK 1 week	79	1.22	24,789,556	381,378	Illiquid	Illiquid
NOK-SEK 1 month	141	2.17	298,926,446	4,598,868	Illiquid	Illiquid
NOK-SEK 3 months	124	1.91	156,710,278	2,410,927	Illiquid	Illiquid
NOK-SEK 6 months	743	11.43	235,250,118	3,619,233	Illiquid	Illiquid
NOK-SEK 1 year	18	0.28	90,235,527	1,388,239	Illiquid	Illiquid
NOK-SGD <1 week	1	0.02	2,848,016	43,816	Illiquid	Illiquid
NOK-SGD 1 month	28	0.43	28,448,688	437,672	Illiquid	Illiquid
NOK-SGD 3 months	4	0.06	11,330,965	174,323	Illiquid	Illiquid
NOK-USD <1 week	5,020	77.23	2,674,555,514	41,147,008	Liquid	Liquid
NOK-USD 1 week	191	2.94	3,731,574,931	57,408,845	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
NOK-USD__1 month	317	4.88	2,302,064,982	35,416,384	Liquid	Liquid
NOK-USD__3 months	211	3.25	8,986,254,110	138,250,063	Liquid	Liquid
NOK-USD__6 months	868	13.35	1,361,412,739	20,944,811	Liquid	Liquid
NOK-USD__1 year	36	0.55	268,063,350	4,124,052	Illiquid	Illiquid
NOK-USD__2 years	19	0.29	209,802,799	3,227,735	Illiquid	Illiquid
NOK-USD__3 years	19	0.29	98,384,737	1,513,611	Illiquid	Illiquid
NOK-USD__4 years	4	0.06	10,326,612	158,871	Illiquid	Illiquid
NZD-PLN__6 months	1	0.02	8,133	125	Illiquid	Illiquid
NZD-SEK__<1 week	3	0.05	61,549	947	Illiquid	Illiquid
NZD-SEK__1 week	3	0.05	69,370	1,067	Illiquid	Illiquid
NZD-SEK__6 months	50	0.77	13,454,384	206,991	Illiquid	Illiquid
NZD-SGD__<1 week	478	7.35	4,719,485	72,607	Illiquid	Illiquid
NZD-SGD__1 week	23	0.35	46,548	716	Illiquid	Illiquid
NZD-SGD__1 month	2	0.03	106,542	1,639	Illiquid	Illiquid
NZD-SGD__6 months	59	0.91	33,501,108	515,402	Illiquid	Illiquid
NZD-TRY__1 week	4	0.06	22,547	347	Illiquid	Illiquid
NZD-TRY__3 months	7	0.11	2,489,335	38,297	Illiquid	Illiquid
NZD-TRY__6 months	20	0.31	427,757	6,581	Illiquid	Illiquid
NZD-USD__<1 week	320,131	4,925.09	3,950,034,860	60,769,767	Liquid	Liquid
NZD-USD__1 week	5,037	77.49	291,406,519	4,483,177	Illiquid	Liquid
NZD-USD__1 month	45,059	693.22	729,750,411	11,226,929	Liquid	Liquid
NZD-USD__3 months	475	7.31	419,950,279	6,460,774	Illiquid	Liquid
NZD-USD__6 months	15,681	241.25	664,744,833	10,226,844	Liquid	Liquid
NZD-USD__1 year	5,271	81.09	82,035,532	1,262,085	Illiquid	Illiquid
NZD-USD__2 years	7	0.11	170,952	2,630	Illiquid	Illiquid
NZD-ZAR__<1 week	1	0.02	852	13	Illiquid	Illiquid
NZD-ZAR__1 week	6	0.09	1,376,582	21,178	Illiquid	Illiquid
NZD-ZAR__1 month	8	0.12	9,023,839	138,828	Illiquid	Illiquid
NZD-ZAR__3 months	4	0.06	1,867,001	28,723	Illiquid	Illiquid
NZD-ZAR__6 months	10	0.15	3,840,574	59,086	Illiquid	Illiquid
PEN-USD__<1 week	58	0.89	126,730,489	1,949,700	Illiquid	Illiquid
PEN-USD__1 week	62	0.95	414,256,354	6,373,175	Illiquid	Illiquid
PEN-USD__1 month	46	0.71	25,008,959	384,753	Illiquid	Illiquid
PEN-USD__3 months	171	2.63	241,692,988	3,718,354	Illiquid	Illiquid
PEN-USD__6 months	26	0.40	14,359,779	220,920	Illiquid	Illiquid
PEN-USD__1 year	6	0.09	1,612,185	24,803	Illiquid	Illiquid
PEN-USD__2 years	11	0.17	3,761,516	57,869	Illiquid	Illiquid
PEN-USD__3 years	2	0.03	2,010,888	30,937	Illiquid	Illiquid
PHP-DKK__1 year	1	0.02	816,163	12,556	Illiquid	Illiquid
PHP-SEK__1 month	1	0.02	334,627	5,148	Illiquid	Illiquid
PHP-SEK__3 months	1	0.02	200,776	3,089	Illiquid	Illiquid
PHP-USD__<1 week	158	2.43	1,302,983,695	20,045,903	Liquid	Liquid
PHP-USD__1 week	94	1.45	361,995,231	5,569,157	Illiquid	Liquid
PHP-USD__1 month	433	6.66	5,012,923,299	77,121,897	Liquid	Liquid
PHP-USD__3 months	1,403	21.58	10,557,929,657	162,429,687	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
PHP-USD__6 months	64	0.98	976,537,625	15,023,656	Illiquid	Illiquid
PHP-USD__1 year	13	0.20	40,798,917	627,676	Illiquid	Illiquid
PHP-USD__2 years	29	0.45	156,206,362	2,403,175	Illiquid	Illiquid
PLN-SEK__<1 week	13	0.20	4,793,136	73,741	Illiquid	Illiquid
PLN-SEK__1 week	20	0.31	386,307	5,943	Illiquid	Illiquid
PLN-SEK__6 months	14	0.22	3,455,325	53,159	Illiquid	Illiquid
PLN-SEK__1 year	2	0.03	1,552,040	23,878	Illiquid	Illiquid
PLN-SGD__1 week	1	0.02	1,324	20	Illiquid	Illiquid
PLN-SGD__1 month	2	0.03	2,077	32	Illiquid	Illiquid
PLN-USD__<1 week	1,692	26.03	344,689,066	5,302,909	Illiquid	Illiquid
PLN-USD__1 week	131	2.02	179,206,197	2,757,018	Illiquid	Illiquid
PLN-USD__1 month	332	5.11	609,576,835	9,378,105	Illiquid	Illiquid
PLN-USD__3 months	552	8.49	580,186,439	8,925,945	Illiquid	Illiquid
PLN-USD__6 months	2,811	43.25	469,154,523	7,217,762	Illiquid	Illiquid
PLN-USD__1 year	13	0.20	3,609,339	55,528	Illiquid	Illiquid
PLN-USD__2 years	2	0.03	3,989,750	61,381	Illiquid	Illiquid
RON-USD__<1 week	81	1.25	16,434,947	252,845	Illiquid	Illiquid
RON-USD__1 week	26	0.40	25,169,250	387,219	Illiquid	Illiquid
RON-USD__1 month	54	0.83	41,376,645	636,564	Illiquid	Illiquid
RON-USD__3 months	58	0.89	21,275,631	327,317	Illiquid	Illiquid
RON-USD__6 months	17	0.26	11,239,624	172,917	Illiquid	Illiquid
RON-USD__1 year	1	0.02	123,315	1,897	Illiquid	Illiquid
RUB-USD__<1 week	3,042	46.80	2,810,645,387	43,240,698	Liquid	Liquid
RUB-USD__1 week	207	3.18	1,472,013,162	22,646,356	Liquid	Liquid
RUB-USD__1 month	758	11.66	1,529,672,262	23,533,419	Liquid	Liquid
RUB-USD__3 months	979	15.06	4,117,095,838	63,339,936	Liquid	Liquid
RUB-USD__6 months	2,939	45.22	14,238,902,386	219,060,037	Liquid	Liquid
RUB-USD__1 year	75	1.15	427,446,391	6,576,098	Illiquid	Illiquid
RUB-USD__2 years	43	0.66	222,936,720	3,429,796	Illiquid	Illiquid
RUB-USD__3 years	10	0.15	95,194,998	1,464,538	Illiquid	Illiquid
SAR-SEK__<1 week	1	0.02	3,868	60	Illiquid	Illiquid
SAR-USD__<1 week	5	0.08	59,001,320	907,713	Illiquid	Illiquid
SAR-USD__1 week	32	0.49	367,486,261	5,653,635	Illiquid	Illiquid
SAR-USD__1 month	8	0.12	50,809,469	781,684	Illiquid	Illiquid
SAR-USD__3 months	1	0.02	77,347	1,190	Illiquid	Illiquid
SAR-USD__6 months	1	0.02	21,760	335	Illiquid	Illiquid
SEK-SGD__1 month	5	0.08	4,878,223	75,050	Illiquid	Illiquid
SEK-SGD__3 months	9	0.14	6,206,800	95,489	Illiquid	Illiquid
SEK-SGD__6 months	1	0.02	447,290	6,881	Illiquid	Illiquid
SEK-TWD__3 months	1	0.02	1,351,491	20,792	Illiquid	Illiquid
SEK-USD__<1 week	3,445	53.00	1,332,412,396	20,498,652	Liquid	Liquid
SEK-USD__1 week	244	3.75	2,182,917,443	33,583,345	Liquid	Liquid
SEK-USD__1 month	335	5.15	1,817,233,272	27,957,435	Liquid	Liquid
SEK-USD__3 months	221	3.40	2,702,204,764	41,572,381	Liquid	Liquid
SEK-USD__6 months	3,816	58.71	1,536,527,217	23,638,880	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
SEK-USD__1 year	89	1.37	317,072,608	4,878,040	Illiquid	Illiquid
SEK-USD__2 years	4	0.06	73,265,454	1,127,161	Illiquid	Illiquid
SEK-USD__4 years	3	0.05	2,058,270	31,666	Illiquid	Illiquid
SEK-USD__5 years	1	0.02	757,451	11,653	Illiquid	Illiquid
SEK-ZAR__3 months	1	0.02	497,231	7,650	Illiquid	Illiquid
SGD-BRL__1 year	2	0.03	1,139,151	17,525	Illiquid	Illiquid
SGD-BRL__2 years	2	0.03	1,083,547	16,670	Illiquid	Illiquid
SGD-USD__<1 week	9,641	148.32	853,424,277	13,129,604	Liquid	Illiquid
SGD-USD__1 week	370	5.69	528,391,229	8,129,096	Illiquid	Illiquid
SGD-USD__1 month	654	10.06	315,760,531	4,857,854	Illiquid	Illiquid
SGD-USD__3 months	347	5.34	624,922,910	9,614,199	Illiquid	Illiquid
SGD-USD__6 months	904	13.91	301,696,241	4,641,481	Illiquid	Illiquid
SGD-USD__1 year	55	0.85	3,177,465	48,884	Illiquid	Illiquid
SGD-ZAR__1 week	1	0.02	40,348	621	Illiquid	Illiquid
THB-USD__<1 week	62	0.95	108,310,934	1,666,322	Illiquid	Illiquid
THB-USD__1 week	92	1.42	434,948,204	6,691,511	Illiquid	Illiquid
THB-USD__1 month	116	1.78	190,976,162	2,938,095	Illiquid	Illiquid
THB-USD__3 months	167	2.57	315,880,204	4,859,695	Illiquid	Illiquid
THB-USD__6 months	145	2.23	409,423,110	6,298,817	Illiquid	Illiquid
THB-USD__1 year	2	0.03	4,037,560	62,116	Illiquid	Illiquid
THB-USD__2 years	4	0.06	5,323,137	81,894	Illiquid	Illiquid
TRY-BGN__<1 week	10	0.15	10,815	166	Illiquid	Illiquid
TRY-BRL__1 year	1	0.02	101,388	1,560	Illiquid	Illiquid
TRY-USD__<1 week	8,814	135.60	3,958,512,498	60,900,192	Liquid	Liquid
TRY-USD__1 week	314	4.83	260,863,275	4,013,281	Illiquid	Liquid
TRY-USD__1 month	806	12.40	656,501,608	10,100,025	Liquid	Liquid
TRY-USD__3 months	379	5.83	805,837,696	12,397,503	Liquid	Liquid
TRY-USD__6 months	3,979	61.22	815,621,363	12,548,021	Liquid	Liquid
TRY-USD__1 year	138	2.12	33,839,893	520,614	Illiquid	Illiquid
TRY-USD__2 years	18	0.28	12,912,369	198,652	Illiquid	Illiquid
TRY-ZAR__6 months	64	0.98	30,735,227	472,850	Illiquid	Illiquid
TWD-DKK__3 months	1	0.02	1,677,382	25,806	Illiquid	Illiquid
TWD-DKK__1 year	1	0.02	1,317,943	20,276	Illiquid	Illiquid
TWD-USD__<1 week	157	2.42	1,080,780,257	16,627,389	Liquid	Liquid
TWD-USD__1 week	185	2.85	2,113,027,163	32,508,110	Liquid	Liquid
TWD-USD__1 month	547	8.42	5,208,496,200	80,130,711	Liquid	Liquid
TWD-USD__3 months	1,242	19.11	10,903,300,723	167,743,088	Liquid	Liquid
TWD-USD__6 months	96	1.48	2,137,315,030	32,881,770	Liquid	Liquid
TWD-USD__1 year	37	0.57	566,005,570	8,707,778	Illiquid	Illiquid
TWD-USD__2 years	22	0.34	141,322,220	2,174,188	Illiquid	Illiquid
UAH-SEK__3 months	1	0.02	686,615	10,563	Illiquid	Illiquid
USD-AMD__1 year	5	0.08	13,528,583	208,132	Illiquid	Illiquid
USD-ARS__1 week	4	0.06	13,954,830	214,690	Illiquid	Illiquid
USD-ARS__3 months	2	0.03	2,985,356	45,929	Illiquid	Illiquid
USD-AZN__1 year	1	0.02	317,849	4,890	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-BGN_<1 week	3,617	55.65	17,079,956	262,769	Illiquid	Illiquid
USD-BRL_<1 week	62	0.95	899,698,095	13,841,509	Illiquid	Illiquid
USD-BRL_1 month	18	0.28	348,111,705	5,355,565	Illiquid	Illiquid
USD-BRL_3 months	19	0.29	349,756,038	5,380,862	Illiquid	Illiquid
USD-BRL_6 months	7	0.11	102,185,925	1,572,091	Illiquid	Illiquid
USD-BRL_1 year	28	0.43	239,326,797	3,681,951	Illiquid	Illiquid
USD-CAD_<1 week	4	0.06	21,249,319	326,913	Illiquid	Illiquid
USD-CAD_1 month	9	0.14	2,166,730	33,334	Illiquid	Illiquid
USD-CHF_3 months	2	0.03	588,999	9,062	Illiquid	Illiquid
USD-CHF_1 year	4	0.06	16,535,306	254,389	Illiquid	Illiquid
USD-CHF_2 years	1	0.02	2,175,698	33,472	Illiquid	Illiquid
USD-CLP_<1 week	27	0.42	344,540,229	5,300,619	Illiquid	Illiquid
USD-CLP_1 week	3	0.05	10,154,623	156,225	Illiquid	Illiquid
USD-CLP_1 month	3	0.05	10,154,168	156,218	Illiquid	Illiquid
USD-CLP_3 months	3	0.05	50,777,662	781,195	Illiquid	Illiquid
USD-CNY_<1 week	46	0.71	554,816,710	8,535,642	Illiquid	Illiquid
USD-CNY_1 week	2	0.03	18,680	287	Illiquid	Illiquid
USD-CNY_1 month	5	0.08	47,867,111	736,417	Illiquid	Illiquid
USD-CNY_3 months	16	0.25	122,713,954	1,887,907	Illiquid	Illiquid
USD-CNY_6 months	21	0.32	87,604,641	1,347,764	Illiquid	Illiquid
USD-CNY_1 year	9	0.14	76,033,734	1,169,750	Illiquid	Illiquid
USD-CNY_2 years	58	0.89	102,112,767	1,570,966	Illiquid	Illiquid
USD-COP_<1 week	14	0.22	186,293,228	2,866,050	Illiquid	Illiquid
USD-COP_1 month	4	0.06	14,504,654	223,149	Illiquid	Illiquid
USD-COP_3 months	2	0.03	1,015,326	15,620	Illiquid	Illiquid
USD-GEL_1 year	1	0.02	4,965,518	76,393	Illiquid	Illiquid
USD-GTQ_2 years	1	0.02	723,820	11,136	Illiquid	Illiquid
USD-HRK_6 months	2	0.03	247,099	3,802	Illiquid	Illiquid
USD-IDR_<1 week	46	0.71	412,029,679	6,338,918	Illiquid	Illiquid
USD-IDR_3 months	9	0.14	22,337,927	343,660	Illiquid	Illiquid
USD-ILS_1 week	1	0.02	209,058	3,216	Illiquid	Illiquid
USD-ILS_3 months	1	0.02	208,354	3,205	Illiquid	Illiquid
USD-ILS_6 months	1	0.02	209,636	3,225	Illiquid	Illiquid
USD-INR_<1 week	56	0.86	1,138,948,171	17,522,280	Illiquid	Illiquid
USD-INR_1 week	19	0.29	248,434,429	3,822,068	Illiquid	Illiquid
USD-INR_1 month	42	0.65	221,387,696	3,405,965	Illiquid	Illiquid
USD-INR_3 months	107	1.65	188,560,507	2,900,931	Illiquid	Illiquid
USD-INR_6 months	2	0.03	94,707	1,457	Illiquid	Illiquid
USD-INR_1 year	3	0.05	43,521,190	669,557	Illiquid	Illiquid
USD-JPY_1 month	12	0.18	11,048,784	169,981	Illiquid	Illiquid
USD-JPY_3 months	1	0.02	127,007	1,954	Illiquid	Illiquid
USD-KGS_1 week	1	0.02	1,241,061	19,093	Illiquid	Illiquid
USD-KGS_6 months	8	0.12	4,242,540	65,270	Illiquid	Illiquid
USD-KGS_1 year	10	0.15	11,538,211	177,511	Illiquid	Illiquid
USD-KGS_2 years	2	0.03	3,580,221	55,080	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-KRW <1 week	21	0.32	266,553,504	4,100,823	Illiquid	Illiquid
USD-KRW 1 week	2	0.03	6,527,094	100,417	Illiquid	Illiquid
USD-KRW 1 month	4	0.06	7,977,560	122,732	Illiquid	Illiquid
USD-KRW 3 months	6	0.09	124,740,027	1,919,077	Illiquid	Illiquid
USD-KRW 6 months	3	0.05	116,040,007	1,785,231	Illiquid	Illiquid
USD-KWD <1 week	5	0.08	428,826	6,597	Illiquid	Illiquid
USD-LTL <1 week	59	0.91	5,901,219	90,788	Illiquid	Illiquid
USD-LTL 1 week	9	0.14	191,556	2,947	Illiquid	Illiquid
USD-LTL 1 month	18	0.28	1,071,677	16,487	Illiquid	Illiquid
USD-LTL 3 months	22	0.34	3,027,510	46,577	Illiquid	Illiquid
USD-LTL 6 months	26	0.40	4,776,430	73,484	Illiquid	Illiquid
USD-MXN 1 month	2	0.03	893,042	13,739	Illiquid	Illiquid
USD-MXN 3 months	2	0.03	1,460,888	22,475	Illiquid	Illiquid
USD-MYR <1 week	16	0.25	116,099,914	1,786,153	Illiquid	Illiquid
USD-NZD 1 week	4	0.06	124,467	1,915	Illiquid	Illiquid
USD-PEN 3 months	4	0.06	29,009,309	446,297	Illiquid	Illiquid
USD-PHP <1 week	7	0.11	36,025,525	554,239	Illiquid	Illiquid
USD-QAR <1 week	6	0.09	77,984	1,200	Illiquid	Illiquid
USD-QAR 1 week	5	0.08	326,355	5,021	Illiquid	Illiquid
USD-QAR 1 month	2	0.03	4,859,722	74,765	Illiquid	Illiquid
USD-QAR 3 months	1	0.02	3,265,579	50,240	Illiquid	Illiquid
USD-RSD <1 week	6	0.09	2,973,454	45,745	Illiquid	Illiquid
USD-RSD 1 week	1	0.02	1,578,321	24,282	Illiquid	Illiquid
USD-RUB <1 week	42	0.65	192,559,427	2,962,453	Illiquid	Illiquid
USD-RUB 1 week	2	0.03	2,900,931	44,630	Illiquid	Illiquid
USD-RUB 1 month	8	0.12	48,818,363	751,052	Illiquid	Illiquid
USD-RUB 3 months	14	0.22	24,840,939	382,168	Illiquid	Illiquid
USD-RUB 6 months	18	0.28	64,891,004	998,323	Illiquid	Illiquid
USD-SEK 1 month	1	0.02	507,663	7,810	Illiquid	Illiquid
USD-TWD <1 week	10	0.15	83,777,348	1,288,882	Illiquid	Illiquid
USD-TWD 1 week	2	0.03	4,351,396	66,945	Illiquid	Illiquid
USD-TWD 3 months	8	0.12	69,622,341	1,071,113	Illiquid	Illiquid
USD-TWD 2 years	7	0.11	65,274,539	1,004,224	Illiquid	Illiquid
USD-UAH 1 month	1	0.02	725,233	11,157	Illiquid	Illiquid
USD-UAH 3 months	5	0.08	3,041,834	46,797	Illiquid	Illiquid
USD-UYU 3 months	1	0.02	213,651	3,287	Illiquid	Illiquid
USD-UYU 6 months	2	0.03	2,494,857	38,382	Illiquid	Illiquid
USD-VND 1 week	1	0.02	68,700	1,057	Illiquid	Illiquid
USD-VND 1 month	8	0.12	33,364,889,185	513,305,987	Illiquid	Illiquid
USD-VND 3 months	8	0.12	7,495,026	115,308	Illiquid	Illiquid
USD-VND 6 months	1	0.02	21,031,748,816	323,565,366	Illiquid	Illiquid
USD-XAG 1 month	2	0.03	4,297	66	Illiquid	Illiquid
USD-XAG 3 months	2	0.03	610,379	9,390	Illiquid	Illiquid
USD-XAG 6 months	64	0.98	3,999,687	61,534	Illiquid	Illiquid
USD-XAG 1 year	164	2.52	282,375	4,344	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
NON-DELIVERABLE FORWARDS (NDF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-XAU__<1 week	21,203	326.20	14,561,399,388	224,021,529	Liquid	Liquid
USD-XAU__1 week	2,020	31.08	752,557,575	11,577,809	Liquid	Liquid
USD-XAU__1 month	11,336	174.40	13,349,467,326	205,376,420	Liquid	Liquid
USD-XAU__3 months	275	4.23	25,180,652,009	387,394,646	Liquid	Liquid
USD-XAU__6 months	36,675	564.23	2,120,461,874,957	32,622,490,384	Liquid	Liquid
USD-XAU__1 year	7,798	119.97	5,211,955,767	80,183,935	Liquid	Liquid
USD-XAU__2 years	47	0.72	885,188	13,618	Illiquid	Illiquid
USD-XPD__6 months	8	0.12	165,274	2,543	Illiquid	Illiquid
USD-XPD__1 year	2	0.03	1,181	18	Illiquid	Illiquid
USD-XPT__6 months	6	0.09	18,365	283	Illiquid	Illiquid
USD-XPT__1 year	2	0.03	1,023	16	Illiquid	Illiquid
USD-ZAR__<1 week	5,398	83.05	11,905,365,303	183,159,466	Liquid	Liquid
USD-ZAR__1 week	801	12.32	3,009,548,624	46,300,748	Liquid	Liquid
USD-ZAR__1 month	747	11.49	1,240,772,561	19,088,809	Liquid	Liquid
USD-ZAR__3 months	431	6.63	2,116,002,574	32,553,886	Liquid	Liquid
USD-ZAR__6 months	1,235	19.00	946,530,453	14,562,007	Liquid	Liquid
USD-ZAR__1 year	29	0.45	4,706,559	72,409	Illiquid	Illiquid
USD-ZAR__2 years	2	0.03	2,255,720	34,703	Illiquid	Illiquid
USD-ZMW__3 years	1	0.02	352,988	5,431	Illiquid	Illiquid
USD-ZMW__4 years	1	0.02	352,988	5,431	Illiquid	Illiquid
XAG-XAU__6 months	549	8.45	5,963,883,093	91,752,048	Liquid	Illiquid
XAU-AUD__6 months	174	2.68	20,944,438,510	322,222,131	Liquid	Illiquid
XAU-CHF__6 months	5	0.08	94,503,127	1,453,894	Illiquid	Illiquid
XAU-CNH__6 months	11	0.17	228,534,728	3,515,919	Illiquid	Illiquid
XAU-HKD__6 months	8	0.12	3,156,046,315	48,554,559	Illiquid	Illiquid
XAU-JPY__6 months	154	2.37	560,228,717,358	8,618,903,344	Liquid	Illiquid
XAU-RUB__6 months	43	0.66	256,066,159,843	3,939,479,382	Illiquid	Illiquid
XAU-THB__6 months	12	0.18	24,246,857,285	373,028,574	Illiquid	Illiquid
XAU-TRY__6 months	26	0.40	2,899,598,631	44,609,210	Illiquid	Illiquid

Table 3: Non-deliverable Forwards (NDF) - liquidity assessment

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AED-AUD_1 week	1	0.02	19,953	307	Illiquid	Illiquid
AED-AUD_6 months	1	0.02	849,026	13,062	Illiquid	Illiquid
AED-AUD_1 year	1	0.02	752,276	11,573	Illiquid	Illiquid
AED-CAD_1 week	2	0.03	71,077	1,093	Illiquid	Illiquid
AED-CAD_3 months	1	0.02	801,638	12,333	Illiquid	Illiquid
AED-CAD_6 months	1	0.02	801,638	12,333	Illiquid	Illiquid
AED-DKK_1 month	1	0.02	59,045	908	Illiquid	Illiquid
AED-HKD_1 week	1	0.02	45,808	705	Illiquid	Illiquid
AED-INR_1 month	3	0.05	1,953,837	30,059	Illiquid	Illiquid
AED-INR_6 months	2	0.03	2,747,247	42,265	Illiquid	Illiquid
AED-SEK_1 week	11	0.17	23,898,938	367,676	Illiquid	Illiquid
AED-SEK_1 month	3	0.05	39,854	613	Illiquid	Illiquid
AED-SEK_3 months	2	0.03	164,869	2,536	Illiquid	Illiquid
AED-SEK_6 months	3	0.05	368,860	5,675	Illiquid	Illiquid
AED-USD <1 week	35	0.54	25,080,916	385,860	Illiquid	Illiquid
AED-USD_1 week	13	0.20	5,483,077	84,355	Illiquid	Illiquid
AED-USD_1 month	10	0.15	48,283,150	742,818	Illiquid	Illiquid
AED-USD_3 months	5	0.08	18,980,638	292,010	Illiquid	Illiquid
AED-USD_2 years	2	0.03	108,784,908	1,673,614	Illiquid	Illiquid
AED-ZAR_1 week	2	0.03	13,291	204	Illiquid	Illiquid
ARS-USD <1 week	40	0.62	266,914,776	4,106,381	Illiquid	Illiquid
ARS-USD_1 month	23	0.35	63,415,938	975,630	Illiquid	Illiquid
ARS-USD_3 months	3	0.05	4,740,807	72,935	Illiquid	Illiquid
ARS-USD_6 months	2	0.03	6,482,527	99,731	Illiquid	Illiquid
AUD-CAD <1 week	4	0.06	1,336,350	20,559	Illiquid	Illiquid
AUD-CAD_1 week	11	0.17	3,683,168	56,664	Illiquid	Illiquid
AUD-CAD_1 month	3	0.05	393,664	6,056	Illiquid	Illiquid
AUD-CAD_3 months	23	0.35	3,634,241	55,911	Illiquid	Illiquid
AUD-CAD_6 months	4	0.06	1,336,982	20,569	Illiquid	Illiquid
AUD-CHF <1 week	1	0.02	6,026	93	Illiquid	Illiquid
AUD-CHF_1 week	99	1.52	2,682,392	41,268	Illiquid	Illiquid
AUD-CHF_1 month	17	0.26	8,780,175	135,080	Illiquid	Illiquid
AUD-CHF_3 months	12	0.18	2,346,917	36,106	Illiquid	Illiquid
AUD-CHF_6 months	7	0.11	47,141,813	725,259	Illiquid	Illiquid
AUD-CHF_1 year	2	0.03	133,903	2,060	Illiquid	Illiquid
AUD-CNY_1 month	1	0.02	98,144	1,510	Illiquid	Illiquid
AUD-CNY_3 months	1	0.02	160,046	2,462	Illiquid	Illiquid
AUD-CNY_6 months	5	0.08	1,739,141	26,756	Illiquid	Illiquid
AUD-CNY_1 year	2	0.03	3,686,750	56,719	Illiquid	Illiquid
AUD-CNY_2 years	2	0.03	3,484,476	53,607	Illiquid	Illiquid
AUD-DKK_1 week	3	0.05	27,573	424	Illiquid	Illiquid
AUD-DKK_1 month	12	0.18	3,214,333	49,451	Illiquid	Illiquid
AUD-DKK_3 months	6	0.09	3,382,441	52,038	Illiquid	Illiquid
AUD-DKK_6 months	1	0.02	669,514	10,300	Illiquid	Illiquid
AUD-DKK_1 year	2	0.03	6,695,139	103,002	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-DKK__2 years	2	0.03	1,339,028	20,600	Illiquid	Illiquid
AUD-EUR__<1 week	155	2.38	228,279,647	3,511,995	Illiquid	Illiquid
AUD-EUR__1 week	332	5.11	203,885,961	3,136,707	Illiquid	Illiquid
AUD-EUR__1 month	587	9.03	631,027,564	9,708,116	Illiquid	Illiquid
AUD-EUR__3 months	514	7.91	990,333,906	15,235,906	Liquid	Illiquid
AUD-EUR__6 months	162	2.49	454,370,259	6,990,312	Illiquid	Illiquid
AUD-EUR__1 year	95	1.46	106,574,989	1,639,615	Illiquid	Illiquid
AUD-EUR__2 years	64	0.98	50,473,138	776,510	Illiquid	Illiquid
AUD-EUR__31 years	1	0.02	199,177	3,064	Illiquid	Illiquid
AUD-GBP__<1 week	104	1.60	57,659,311	887,066	Illiquid	Illiquid
AUD-GBP__1 week	213	3.28	55,888,516	859,823	Illiquid	Illiquid
AUD-GBP__1 month	39	0.60	65,033,692	1,000,518	Illiquid	Illiquid
AUD-GBP__3 months	54	0.83	207,329,420	3,189,683	Illiquid	Illiquid
AUD-GBP__6 months	25	0.38	363,679,658	5,595,072	Illiquid	Illiquid
AUD-GBP__1 year	21	0.32	34,896,759	536,873	Illiquid	Illiquid
AUD-GBP__2 years	8	0.12	3,461,559	53,255	Illiquid	Illiquid
AUD-GBP__3 years	1	0.02	116,787	1,797	Illiquid	Illiquid
AUD-HKD__<1 week	1	0.02	147,740	2,273	Illiquid	Illiquid
AUD-HKD__1 week	4	0.06	1,602,472	24,653	Illiquid	Illiquid
AUD-HKD__1 month	8	0.12	2,384,872	36,690	Illiquid	Illiquid
AUD-HKD__3 months	7	0.11	4,732,787	72,812	Illiquid	Illiquid
AUD-HKD__1 year	1	0.02	1,004,271	15,450	Illiquid	Illiquid
AUD-INR__1 week	2	0.03	941,055	14,478	Illiquid	Illiquid
AUD-JPY__<1 week	233	3.58	44,120,728	678,780	Illiquid	Illiquid
AUD-JPY__1 week	68	1.05	19,788,811	304,443	Illiquid	Illiquid
AUD-JPY__1 month	75	1.15	65,589,069	1,009,063	Illiquid	Illiquid
AUD-JPY__3 months	18	0.28	8,086,422	124,406	Illiquid	Illiquid
AUD-JPY__1 year	4	0.06	4,474,264	68,835	Illiquid	Illiquid
AUD-KRW__1 week	1	0.02	7,345,763	113,012	Illiquid	Illiquid
AUD-KRW__3 months	1	0.02	137,951	2,122	Illiquid	Illiquid
AUD-KRW__1 year	1	0.02	7,376,596	113,486	Illiquid	Illiquid
AUD-NOK__1 week	7	0.11	2,083,120	32,048	Illiquid	Illiquid
AUD-NOK__1 month	16	0.25	39,378,690	605,826	Illiquid	Illiquid
AUD-NOK__6 months	5	0.08	1,375,851	21,167	Illiquid	Illiquid
AUD-NZD__<1 week	2	0.03	964,391	14,837	Illiquid	Illiquid
AUD-NZD__1 week	16	0.25	20,473,972	314,984	Illiquid	Illiquid
AUD-NZD__1 month	80	1.23	200,714,558	3,087,916	Illiquid	Illiquid
AUD-NZD__3 months	25	0.38	39,154,433	602,376	Illiquid	Illiquid
AUD-NZD__6 months	6	0.09	34,670,777	533,397	Illiquid	Illiquid
AUD-NZD__1 year	2	0.03	2,489,335	38,297	Illiquid	Illiquid
AUD-NZD__2 years	1	0.02	200,854	3,090	Illiquid	Illiquid
AUD-SEK__<1 week	9	0.14	18,453,195	283,895	Illiquid	Illiquid
AUD-SEK__1 week	17	0.26	8,644,399	132,991	Illiquid	Illiquid
AUD-SEK__1 month	15	0.23	37,546,023	577,631	Illiquid	Illiquid
AUD-SEK__3 months	27	0.42	74,576,564	1,147,332	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-SEK_6 months	14	0.22	15,696,589	241,486	Illiquid	Illiquid
AUD-SEK_1 year	15	0.23	15,944,134	245,294	Illiquid	Illiquid
AUD-SEK_2 years	39	0.60	17,942,973	276,046	Illiquid	Illiquid
AUD-SEK_3 years	12	0.18	9,707,952	149,353	Illiquid	Illiquid
AUD-SEK_4 years	5	0.08	3,012,813	46,351	Illiquid	Illiquid
AUD-SGD_<1 week	3	0.05	3,703,035	56,970	Illiquid	Illiquid
AUD-SGD_1 week	4	0.06	993,793	15,289	Illiquid	Illiquid
AUD-SGD_1 month	9	0.14	4,954,705	76,226	Illiquid	Illiquid
AUD-SGD_3 months	5	0.08	5,077,740	78,119	Illiquid	Illiquid
AUD-SGD_6 months	3	0.05	1,594,278	24,527	Illiquid	Illiquid
AUD-SGD_1 year	2	0.03	3,617,678	55,657	Illiquid	Illiquid
AUD-THB_<1 week	7	0.11	948,439	14,591	Illiquid	Illiquid
AUD-THB_1 week	6	0.09	729,477	11,223	Illiquid	Illiquid
AUD-THB_3 months	2	0.03	292,355	4,498	Illiquid	Illiquid
AUD-USD_<1 week	224	3.45	448,272,025	6,896,493	Illiquid	Illiquid
AUD-USD_1 week	350	5.38	621,662,290	9,564,035	Illiquid	Illiquid
AUD-USD_1 month	784	12.06	456,418,011	7,021,816	Illiquid	Illiquid
AUD-USD_3 months	673	10.35	1,781,046,895	27,400,721	Liquid	Illiquid
AUD-USD_6 months	66	1.02	71,607,205	1,101,649	Illiquid	Illiquid
AUD-USD_1 year	54	0.83	82,841,529	1,274,485	Illiquid	Illiquid
AUD-USD_2 years	19	0.29	22,860,655	351,702	Illiquid	Illiquid
AUD-USD_3 years	28	0.43	4,863,440,233	74,822,157	Illiquid	Illiquid
AUD-ZAR_1 week	1	0.02	22,335	344	Illiquid	Illiquid
AUD-ZAR_1 month	1	0.02	17,531	270	Illiquid	Illiquid
AUD-ZAR_3 months	3	0.05	1,006,655	15,487	Illiquid	Illiquid
AUD-ZAR_6 months	2	0.03	2,752,660	42,349	Illiquid	Illiquid
AUD-ZAR_1 year	4	0.06	9,378,167	144,279	Illiquid	Illiquid
BGN-CHF_1 month	4	0.06	42,256,619	650,102	Illiquid	Illiquid
BHD-USD_<1 week	1	0.02	807,902	12,429	Illiquid	Illiquid
BHD-USD_1 month	2	0.03	587,055	9,032	Illiquid	Illiquid
BHD-USD_3 months	2	0.03	17,613,174	270,972	Illiquid	Illiquid
BRL-DKK_<1 week	2	0.03	740,666	11,395	Illiquid	Illiquid
BRL-DKK_3 months	2	0.03	733,652	11,287	Illiquid	Illiquid
BRL-EUR_<1 week	35	0.54	103,077,434	1,585,807	Illiquid	Illiquid
BRL-EUR_1 week	1	0.02	922,112	14,186	Illiquid	Illiquid
BRL-EUR_1 month	23	0.35	50,093,232	770,665	Illiquid	Illiquid
BRL-EUR_3 months	25	0.38	123,227,732	1,895,811	Illiquid	Illiquid
BRL-EUR_6 months	3	0.05	23,395,419	359,930	Illiquid	Illiquid
BRL-SEK_3 months	2	0.03	43,599,661	670,764	Illiquid	Illiquid
BRL-USD_<1 week	57	0.88	236,394,921	3,636,845	Illiquid	Illiquid
BRL-USD_1 month	36	0.55	199,412,298	3,067,882	Illiquid	Illiquid
BRL-USD_3 months	136	2.09	191,862,939	2,951,738	Illiquid	Illiquid
BRL-USD_6 months	36	0.55	241,292,725	3,712,196	Illiquid	Illiquid
BRL-USD_1 year	15	0.23	83,650,621	1,286,933	Illiquid	Illiquid
BWP-SEK_1 month	3	0.05	4,051,645	62,333	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
BWP-SEK__3 months	3	0.05	4,241,824	65,259	Illiquid	Illiquid
BWP-USD__1 week	2	0.03	614,626	9,456	Illiquid	Illiquid
BWP-USD__1 month	2	0.03	992,240	15,265	Illiquid	Illiquid
BWP-ZAR__3 months	1	0.02	826,866	12,721	Illiquid	Illiquid
CAD-ARS__<1 week	2	0.03	1,500,735	23,088	Illiquid	Illiquid
CAD-ARS__3 months	2	0.03	1,529,435	23,530	Illiquid	Illiquid
CAD-CHF__<1 week	14	0.22	15,925,762	245,012	Illiquid	Illiquid
CAD-CHF__1 month	13	0.20	17,953,754	276,212	Illiquid	Illiquid
CAD-CHF__3 months	19	0.29	1,768,257	27,204	Illiquid	Illiquid
CAD-CHF__6 months	2	0.03	20,381,111	313,556	Illiquid	Illiquid
CAD-CHF__1 year	1	0.02	436,538	6,716	Illiquid	Illiquid
CAD-CHF__2 years	2	0.03	131,917	2,029	Illiquid	Illiquid
CAD-CLP__<1 week	2	0.03	1,017,578	15,655	Illiquid	Illiquid
CAD-CLP__3 months	2	0.03	1,081,110	16,632	Illiquid	Illiquid
CAD-CNY__3 months	1	0.02	87,248	1,342	Illiquid	Illiquid
CAD-COP__<1 week	2	0.03	5,963,776	91,750	Illiquid	Illiquid
CAD-COP__3 months	2	0.03	7,283,227	112,050	Illiquid	Illiquid
CAD-CZK__<1 week	1	0.02	7,323	113	Illiquid	Illiquid
CAD-DKK__<1 week	1	0.02	15,830	244	Illiquid	Illiquid
CAD-DKK__1 month	3	0.05	1,430,599	22,009	Illiquid	Illiquid
CAD-DKK__3 months	10	0.15	4,897,161	75,341	Illiquid	Illiquid
CAD-DKK__6 months	3	0.05	1,409,220	21,680	Illiquid	Illiquid
CAD-DKK__2 years	2	0.03	815,010	12,539	Illiquid	Illiquid
CAD-EUR__<1 week	162	2.49	288,854,127	4,443,910	Illiquid	Illiquid
CAD-EUR__1 week	162	2.49	119,633,803	1,840,520	Illiquid	Illiquid
CAD-EUR__1 month	320	4.92	368,327,761	5,666,581	Illiquid	Illiquid
CAD-EUR__3 months	352	5.42	883,396,180	13,590,710	Liquid	Illiquid
CAD-EUR__6 months	97	1.49	128,495,638	1,976,856	Illiquid	Illiquid
CAD-EUR__1 year	54	0.83	47,049,579	723,840	Illiquid	Illiquid
CAD-EUR__2 years	42	0.65	54,908,373	844,744	Illiquid	Illiquid
CAD-EUR__3 years	1	0.02	19,787,487	304,423	Illiquid	Illiquid
CAD-GBP__<1 week	60	0.92	18,961,148	291,710	Illiquid	Illiquid
CAD-GBP__1 week	52	0.80	30,907,625	475,502	Illiquid	Illiquid
CAD-GBP__1 month	15	0.23	89,169,551	1,371,839	Illiquid	Illiquid
CAD-GBP__3 months	58	0.89	148,206,439	2,280,099	Illiquid	Illiquid
CAD-GBP__6 months	14	0.22	21,672,983	333,431	Illiquid	Illiquid
CAD-GBP__1 year	11	0.17	14,378,277	221,204	Illiquid	Illiquid
CAD-GBP__2 years	4	0.06	6,282,409	96,652	Illiquid	Illiquid
CAD-GBP__3 years	1	0.02	123,934	1,907	Illiquid	Illiquid
CAD-HKD__<1 week	6	0.09	762,776	11,735	Illiquid	Illiquid
CAD-HKD__1 week	1	0.02	873,502	13,438	Illiquid	Illiquid
CAD-HKD__1 month	3	0.05	406,284	6,251	Illiquid	Illiquid
CAD-HKD__3 months	5	0.08	1,757,117	27,033	Illiquid	Illiquid
CAD-HKD__1 year	1	0.02	292,671	4,503	Illiquid	Illiquid
CAD-JPY__<1 week	13	0.20	39,416,673	606,410	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CAD-JPY__1 week	1	0.02	23,158	356	Illiquid	Illiquid
CAD-JPY__1 month	2	0.03	31,523	485	Illiquid	Illiquid
CAD-JPY__3 months	42	0.65	115,843,501	1,782,208	Illiquid	Illiquid
CAD-KRW__<1 week	2	0.03	2,282,887	35,121	Illiquid	Illiquid
CAD-KRW__3 months	2	0.03	2,597,218	39,957	Illiquid	Illiquid
CAD-MXN__<1 week	3	0.05	2,842,741	43,734	Illiquid	Illiquid
CAD-MXN__1 week	2	0.03	2,110,799	32,474	Illiquid	Illiquid
CAD-MXN__1 month	7	0.11	2,203,516	33,900	Illiquid	Illiquid
CAD-MXN__3 months	2	0.03	3,962,810	60,966	Illiquid	Illiquid
CAD-NOK__<1 week	1	0.02	125,321	1,928	Illiquid	Illiquid
CAD-NOK__1 week	1	0.02	660	10	Illiquid	Illiquid
CAD-NOK__1 month	16	0.25	62,484,046	961,293	Illiquid	Illiquid
CAD-NOK__3 months	5	0.08	1,265,740	19,473	Illiquid	Illiquid
CAD-NZD__1 week	12	0.18	40,498,991	623,061	Illiquid	Illiquid
CAD-NZD__1 month	7	0.11	19,288,961	296,753	Illiquid	Illiquid
CAD-NZD__3 months	1	0.02	1,244,668	19,149	Illiquid	Illiquid
CAD-PHP__<1 week	3	0.05	2,875,356	44,236	Illiquid	Illiquid
CAD-PHP__1 month	1	0.02	215,497	3,315	Illiquid	Illiquid
CAD-PHP__3 months	2	0.03	2,114,563	32,532	Illiquid	Illiquid
CAD-SEK__<1 week	20	0.31	5,984,081	92,063	Illiquid	Illiquid
CAD-SEK__1 week	22	0.34	1,483,344	22,821	Illiquid	Illiquid
CAD-SEK__1 month	19	0.29	45,031,815	692,797	Illiquid	Illiquid
CAD-SEK__3 months	26	0.40	55,563,925	854,830	Illiquid	Illiquid
CAD-SEK__6 months	15	0.23	44,213,568	680,209	Illiquid	Illiquid
CAD-SEK__1 year	5	0.08	15,434,179	237,449	Illiquid	Illiquid
CAD-SEK__2 years	2	0.03	850,862	13,090	Illiquid	Illiquid
CAD-SGD__1 week	2	0.03	42,032	647	Illiquid	Illiquid
CAD-SGD__3 months	23	0.35	123,485,764	1,899,781	Illiquid	Illiquid
CAD-THB__<1 week	9	0.14	133,624	2,056	Illiquid	Illiquid
CAD-THB__1 week	4	0.06	43,005	662	Illiquid	Illiquid
CAD-TWD__3 months	1	0.02	145,095	2,232	Illiquid	Illiquid
CAD-USD__<1 week	289	4.45	313,755,786	4,827,012	Illiquid	Illiquid
CAD-USD__1 week	272	4.18	544,765,908	8,381,014	Illiquid	Illiquid
CAD-USD__1 month	345	5.31	803,611,522	12,363,254	Liquid	Liquid
CAD-USD__3 months	1,051	16.17	1,410,539,452	21,700,607	Liquid	Liquid
CAD-USD__6 months	62	0.95	323,888,669	4,982,903	Illiquid	Illiquid
CAD-USD__1 year	44	0.68	112,687,081	1,733,647	Illiquid	Illiquid
CAD-USD__2 years	43	0.66	63,275,466	973,469	Illiquid	Illiquid
CAD-USD__3 years	7	0.11	10,675,426	164,237	Illiquid	Illiquid
CAD-ZAR__<1 week	1	0.02	1,580,138	24,310	Illiquid	Illiquid
CAD-ZAR__1 week	2	0.03	1,722,198	26,495	Illiquid	Illiquid
CAD-ZAR__1 month	1	0.02	328,918	5,060	Illiquid	Illiquid
CAD-ZAR__3 months	2	0.03	2,635,157	40,541	Illiquid	Illiquid
CHF-CNY__1 month	1	0.02	2,731,268	42,020	Illiquid	Illiquid
CHF-CNY__3 months	2	0.03	985,971	15,169	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-CNY_6 months	2	0.03	1,258,169	19,356	Illiquid	Illiquid
CHF-CNY_1 year	3	0.05	2,493,710	38,365	Illiquid	Illiquid
CHF-CNY_2 years	3	0.05	1,855,216	28,542	Illiquid	Illiquid
CHF-CNY_3 years	2	0.03	611,296	9,405	Illiquid	Illiquid
CHF-CZK_1 month	4	0.06	1,012,076	15,570	Illiquid	Illiquid
CHF-CZK_6 months	9	0.14	9,023,890	138,829	Illiquid	Illiquid
CHF-CZK_1 year	1	0.02	145,841	2,244	Illiquid	Illiquid
CHF-DKK_<1 week	2	0.03	422,053	6,493	Illiquid	Illiquid
CHF-DKK_1 week	9	0.14	7,681,827	118,182	Illiquid	Illiquid
CHF-DKK_1 month	30	0.46	10,399,379	159,990	Illiquid	Illiquid
CHF-DKK_3 months	5	0.08	2,299,606	35,379	Illiquid	Illiquid
CHF-EUR_<1 week	480	7.38	3,353,759,941	51,596,307	Liquid	Liquid
CHF-EUR_1 week	342	5.26	761,741,556	11,719,101	Liquid	Liquid
CHF-EUR_1 month	950	14.62	4,515,714,966	69,472,538	Liquid	Liquid
CHF-EUR_3 months	1,041	16.02	7,828,518,568	120,438,747	Liquid	Liquid
CHF-EUR_6 months	333	5.12	1,940,091,133	29,847,556	Liquid	Liquid
CHF-EUR_1 year	221	3.40	504,686,739	7,764,411	Illiquid	Illiquid
CHF-EUR_2 years	241	3.71	377,204,899	5,803,152	Illiquid	Illiquid
CHF-EUR_3 years	30	0.46	67,367,544	1,036,424	Illiquid	Illiquid
CHF-EUR_4 years	3	0.05	890,650	13,702	Illiquid	Illiquid
CHF-EUR_5 years	2	0.03	75,957	1,169	Illiquid	Illiquid
CHF-GBP_<1 week	95	1.46	79,858,655	1,228,595	Illiquid	Illiquid
CHF-GBP_1 week	121	1.86	61,953,591	953,132	Illiquid	Illiquid
CHF-GBP_1 month	158	2.43	239,263,937	3,680,984	Illiquid	Illiquid
CHF-GBP_3 months	154	2.37	1,056,074,780	16,247,304	Liquid	Illiquid
CHF-GBP_6 months	16	0.25	595,201,090	9,156,940	Illiquid	Illiquid
CHF-GBP_1 year	16	0.25	30,955,226	476,234	Illiquid	Illiquid
CHF-GBP_2 years	1	0.02	5,186,249	79,788	Illiquid	Illiquid
CHF-HKD_<1 week	3	0.05	434,799	6,689	Illiquid	Illiquid
CHF-HKD_1 month	15	0.23	2,747,020	42,262	Illiquid	Illiquid
CHF-HKD_3 months	20	0.31	7,062,093	108,648	Illiquid	Illiquid
CHF-HKD_6 months	1	0.02	4,992,430	76,807	Illiquid	Illiquid
CHF-HKD_1 year	2	0.03	1,801,866	27,721	Illiquid	Illiquid
CHF-HKD_2 years	1	0.02	1,558,227	23,973	Illiquid	Illiquid
CHF-HRK_1 week	1	0.02	41,017	631	Illiquid	Illiquid
CHF-HRK_6 months	2	0.03	157,808	2,428	Illiquid	Illiquid
CHF-HRK_1 year	8	0.12	4,600,997	70,785	Illiquid	Illiquid
CHF-HUF_1 week	6	0.09	117,748	1,812	Illiquid	Illiquid
CHF-HUF_1 month	8	0.12	842,678	12,964	Illiquid	Illiquid
CHF-HUF_3 months	22	0.34	7,548,910	116,137	Illiquid	Illiquid
CHF-HUF_6 months	4	0.06	2,586,568	39,793	Illiquid	Illiquid
CHF-HUF_1 year	9	0.14	7,565,594	116,394	Illiquid	Illiquid
CHF-JPY_<1 week	16	0.25	7,681,394	118,175	Illiquid	Illiquid
CHF-JPY_1 week	16	0.25	18,788,285	289,051	Illiquid	Illiquid
CHF-JPY_1 month	33	0.51	28,353,186	436,203	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-JPY__3 months	49	0.75	18,922,810	291,120	Illiquid	Illiquid
CHF-JPY__6 months	1	0.02	10,849,659	166,918	Illiquid	Illiquid
CHF-JPY__1 year	1	0.02	698,488	10,746	Illiquid	Illiquid
CHF-JPY__2 years	1	0.02	698,488	10,746	Illiquid	Illiquid
CHF-MXN__1 month	4	0.06	299,572	4,609	Illiquid	Illiquid
CHF-MXN__6 months	1	0.02	166,501	2,562	Illiquid	Illiquid
CHF-NOK__<1 week	12	0.18	514,349	7,913	Illiquid	Illiquid
CHF-NOK__1 week	22	0.34	420,831	6,474	Illiquid	Illiquid
CHF-NOK__1 month	28	0.43	39,402,366	606,190	Illiquid	Illiquid
CHF-NOK__3 months	15	0.23	7,148,014	109,969	Illiquid	Illiquid
CHF-NOK__6 months	7	0.11	12,868,697	197,980	Illiquid	Illiquid
CHF-NOK__1 year	2	0.03	1,245,044	19,155	Illiquid	Illiquid
CHF-NZD__<1 week	15	0.23	17,425	268	Illiquid	Illiquid
CHF-NZD__1 week	4	0.06	5,683,317	87,436	Illiquid	Illiquid
CHF-NZD__1 month	3	0.05	212,174	3,264	Illiquid	Illiquid
CHF-NZD__3 months	2	0.03	313,629	4,825	Illiquid	Illiquid
CHF-PLN__<1 week	1	0.02	2,984,693	45,918	Illiquid	Illiquid
CHF-PLN__1 week	1	0.02	8,860	136	Illiquid	Illiquid
CHF-PLN__1 month	4	0.06	363,474	5,592	Illiquid	Illiquid
CHF-PLN__3 months	2	0.03	384,795	5,920	Illiquid	Illiquid
CHF-PLN__6 months	12	0.18	21,167,221	325,650	Illiquid	Illiquid
CHF-RON__1 month	4	0.06	2,237,685	34,426	Illiquid	Illiquid
CHF-RON__3 months	4	0.06	4,020,803	61,859	Illiquid	Illiquid
CHF-RON__1 year	6	0.09	2,285,984	35,169	Illiquid	Illiquid
CHF-RUB__3 months	7	0.11	6,172,809	94,966	Illiquid	Illiquid
CHF-RUB__6 months	1	0.02	611,942	9,414	Illiquid	Illiquid
CHF-RUB__1 year	20	0.31	37,278,233	573,511	Illiquid	Illiquid
CHF-SEK__<1 week	35	0.54	9,008,857	138,598	Illiquid	Illiquid
CHF-SEK__1 week	63	0.97	8,587,886	132,121	Illiquid	Illiquid
CHF-SEK__1 month	40	0.62	61,004,735	938,534	Illiquid	Illiquid
CHF-SEK__3 months	36	0.55	59,872,684	921,118	Illiquid	Illiquid
CHF-SEK__6 months	22	0.34	66,500,795	1,023,089	Illiquid	Illiquid
CHF-SEK__1 year	12	0.18	23,004,025	353,908	Illiquid	Illiquid
CHF-SEK__2 years	3	0.05	1,739,105	26,755	Illiquid	Illiquid
CHF-SGD__1 month	10	0.15	1,090,965	16,784	Illiquid	Illiquid
CHF-SGD__3 months	8	0.12	452,310	6,959	Illiquid	Illiquid
CHF-SGD__1 year	1	0.02	611,681	9,410	Illiquid	Illiquid
CHF-SGD__2 years	1	0.02	611,681	9,410	Illiquid	Illiquid
CHF-THB__<1 week	8	0.12	233,817	3,597	Illiquid	Illiquid
CHF-THB__1 week	4	0.06	85,459	1,315	Illiquid	Illiquid
CHF-TRY__<1 week	2	0.03	145,323	2,236	Illiquid	Illiquid
CHF-TRY__1 month	6	0.09	3,859,530	59,377	Illiquid	Illiquid
CHF-TRY__3 months	2	0.03	830,767	12,781	Illiquid	Illiquid
CHF-TRY__1 year	1	0.02	158,324	2,436	Illiquid	Illiquid
CHF-TRY__2 years	2	0.03	1,158,110	17,817	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-USD <1 week	221	3.40	1,406,685,837	21,641,321	Liquid	Liquid
CHF-USD 1 week	267	4.11	473,629,701	7,286,611	Illiquid	Liquid
CHF-USD 1 month	613	9.43	1,576,730,612	24,257,394	Liquid	Liquid
CHF-USD 3 months	780	12.00	6,042,098,283	92,955,358	Liquid	Liquid
CHF-USD 6 months	143	2.20	637,130,940	9,802,014	Illiquid	Illiquid
CHF-USD 1 year	87	1.34	396,703,774	6,103,135	Illiquid	Illiquid
CHF-USD 2 years	26	0.40	94,291,025	1,450,631	Illiquid	Illiquid
CHF-USD 3 years	4	0.06	10,588,398	162,898	Illiquid	Illiquid
CHF-ZAR <1 week	6	0.09	1,511,480	23,254	Illiquid	Illiquid
CHF-ZAR 1 week	2	0.03	41,992	646	Illiquid	Illiquid
CHF-ZAR 1 month	6	0.09	4,901,543	75,408	Illiquid	Illiquid
CHF-ZAR 3 months	2	0.03	1,162,492	17,884	Illiquid	Illiquid
CHF-ZAR 1 year	10	0.15	9,889,188	152,141	Illiquid	Illiquid
CLP-EUR <1 week	6	0.09	18,104,982	278,538	Illiquid	Illiquid
CLP-EUR 1 month	6	0.09	5,948,701	91,518	Illiquid	Illiquid
CLP-EUR 3 months	6	0.09	26,863,455	413,284	Illiquid	Illiquid
CLP-EUR 1 year	1	0.02	266,843	4,105	Illiquid	Illiquid
CLP-USD <1 week	37	0.57	34,029,031	523,524	Illiquid	Illiquid
CLP-USD 1 week	3	0.05	47,338,106	728,279	Illiquid	Illiquid
CLP-USD 1 month	16	0.25	40,238,569	619,055	Illiquid	Illiquid
CLP-USD 3 months	20	0.31	55,525,649	854,241	Illiquid	Illiquid
CLP-USD 6 months	15	0.23	74,896,670	1,152,256	Illiquid	Illiquid
CLP-USD 1 year	1	0.02	459,090	7,063	Illiquid	Illiquid
CNH-SEK 1 week	3	0.05	26,143,470	402,207	Illiquid	Illiquid
CNH-SEK 1 month	1	0.02	7,050,818	108,474	Illiquid	Illiquid
CNH-SEK 3 months	4	0.06	181,027,731	2,785,042	Illiquid	Illiquid
CNH-SEK 6 months	6	0.09	271,086,134	4,170,556	Illiquid	Illiquid
CNH-SEK 1 year	3	0.05	104,915,079	1,614,078	Illiquid	Illiquid
CNH-USD <1 week	17	0.26	164,837,683	2,535,964	Illiquid	Illiquid
CNH-USD 1 week	16	0.25	74,501,279	1,146,174	Illiquid	Illiquid
CNH-USD 1 month	86	1.32	971,281,373	14,942,790	Liquid	Liquid
CNH-USD 3 months	97	1.49	1,425,713,221	21,934,050	Liquid	Liquid
CNH-USD 6 months	29	0.45	539,718,571	8,303,363	Illiquid	Illiquid
CNH-USD 1 year	18	0.28	229,748,653	3,534,595	Illiquid	Illiquid
CNH-USD 2 years	4	0.06	5,401,689	83,103	Illiquid	Illiquid
CNY-DKK 3 months	2	0.03	15,177,601	233,502	Illiquid	Illiquid
CNY-DKK 6 months	1	0.02	18,814,598	289,455	Illiquid	Illiquid
CNY-EUR <1 week	55	0.85	299,689,597	4,610,609	Illiquid	Illiquid
CNY-EUR 1 week	16	0.25	21,262,043	327,108	Illiquid	Illiquid
CNY-EUR 1 month	101	1.55	186,506,328	2,869,328	Illiquid	Illiquid
CNY-EUR 3 months	186	2.86	263,097,697	4,047,657	Illiquid	Illiquid
CNY-EUR 6 months	39	0.60	166,337,597	2,559,040	Illiquid	Illiquid
CNY-EUR 1 year	39	0.60	127,686,853	1,964,413	Illiquid	Illiquid
CNY-EUR 2 years	12	0.18	11,803,616	181,594	Illiquid	Illiquid
CNY-EUR 3 years	20	0.31	19,355,509	297,777	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CNY-HKD_6 months	1	0.02	5,901,752	90,796	Illiquid	Illiquid
CNY-HKD_1 year	1	0.02	78,223	1,203	Illiquid	Illiquid
CNY-HKD_2 years	1	0.02	4,626,108	71,171	Illiquid	Illiquid
CNY-JPY_3 months	1	0.02	69,535	1,070	Illiquid	Illiquid
CNY-NOK_1 week	1	0.02	175,126	2,694	Illiquid	Illiquid
CNY-SEK_<1 week	2	0.03	45,532,804	700,505	Illiquid	Illiquid
CNY-SEK_1 week	4	0.06	8,471,128	130,325	Illiquid	Illiquid
CNY-SEK_1 month	10	0.15	22,625,233	348,081	Illiquid	Illiquid
CNY-SEK_3 months	23	0.35	302,346,902	4,651,491	Illiquid	Illiquid
CNY-SEK_6 months	3	0.05	1,022,270	15,727	Illiquid	Illiquid
CNY-SEK_1 year	3	0.05	23,353,482	359,284	Illiquid	Illiquid
CNY-SGD_<1 week	12	0.18	3,031,041	46,631	Illiquid	Illiquid
CNY-SGD_1 month	16	0.25	3,243,391	49,898	Illiquid	Illiquid
CNY-SGD_3 months	12	0.18	1,811,092	27,863	Illiquid	Illiquid
CNY-SGD_6 months	9	0.14	2,286,264	35,173	Illiquid	Illiquid
CNY-TWD_<1 week	1	0.02	5,467	84	Illiquid	Illiquid
CNY-USD_<1 week	57	0.88	174,163,350	2,679,436	Illiquid	Illiquid
CNY-USD_1 week	11	0.17	12,767,066	196,416	Illiquid	Illiquid
CNY-USD_1 month	80	1.23	130,032,200	2,000,495	Illiquid	Illiquid
CNY-USD_3 months	122	1.88	357,290,458	5,496,776	Illiquid	Illiquid
CNY-USD_6 months	53	0.82	283,560,652	4,362,472	Illiquid	Illiquid
CNY-USD_1 year	70	1.08	132,930,329	2,045,082	Illiquid	Illiquid
CNY-USD_2 years	20	0.31	211,950,816	3,260,782	Illiquid	Illiquid
CNY-USD_3 years	1	0.02	7,252,327	111,574	Illiquid	Illiquid
COP-EUR_<1 week	8	0.12	16,231,244	249,711	Illiquid	Illiquid
COP-EUR_1 month	5	0.08	16,163,000	248,662	Illiquid	Illiquid
COP-EUR_3 months	5	0.08	6,447,487	99,192	Illiquid	Illiquid
COP-EUR_6 months	1	0.02	674,890	10,383	Illiquid	Illiquid
COP-USD_<1 week	59	0.91	124,724,323	1,918,836	Illiquid	Illiquid
COP-USD_1 week	1	0.02	28,356,599	436,255	Illiquid	Illiquid
COP-USD_1 month	15	0.23	77,024,221	1,184,988	Illiquid	Illiquid
COP-USD_3 months	44	0.68	60,088,152	924,433	Illiquid	Illiquid
COP-USD_6 months	17	0.26	55,727,152	857,341	Illiquid	Illiquid
CZK-DKK_1 week	1	0.02	716,080	11,017	Illiquid	Illiquid
CZK-DKK_3 months	1	0.02	2,734,522	42,070	Illiquid	Illiquid
CZK-EUR_<1 week	120	1.85	112,196,534	1,726,101	Illiquid	Illiquid
CZK-EUR_1 week	70	1.08	127,496,815	1,961,489	Illiquid	Illiquid
CZK-EUR_1 month	300	4.62	514,800,080	7,920,001	Illiquid	Illiquid
CZK-EUR_3 months	365	5.62	616,731,942	9,488,184	Illiquid	Illiquid
CZK-EUR_6 months	106	1.63	140,303,335	2,158,513	Illiquid	Illiquid
CZK-EUR_1 year	140	2.15	137,523,528	2,115,747	Illiquid	Illiquid
CZK-EUR_2 years	75	1.15	139,912,947	2,152,507	Illiquid	Illiquid
CZK-EUR_3 years	11	0.17	7,389,709	113,688	Illiquid	Illiquid
CZK-EUR_4 years	8	0.12	3,830,682	58,934	Illiquid	Illiquid
CZK-EUR_5 years	1	0.02	1,231,684	18,949	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CZK-GBP_<1 week	12	0.18	14,637,418	225,191	Illiquid	Illiquid
CZK-GBP_1 month	3	0.05	655,956	10,092	Illiquid	Illiquid
CZK-GBP_3 months	4	0.06	2,561,812	39,412	Illiquid	Illiquid
CZK-GBP_6 months	12	0.18	9,197,837	141,505	Illiquid	Illiquid
CZK-GBP_1 year	5	0.08	424,725	6,534	Illiquid	Illiquid
CZK-GBP_2 years	5	0.08	473,265	7,281	Illiquid	Illiquid
CZK-HUF_<1 week	4	0.06	217,455	3,345	Illiquid	Illiquid
CZK-HUF_1 week	2	0.03	319,841	4,921	Illiquid	Illiquid
CZK-HUF_3 months	4	0.06	14,814,546	227,916	Illiquid	Illiquid
CZK-HUF_6 months	2	0.03	1,895,935	29,168	Illiquid	Illiquid
CZK-HUF_1 year	4	0.06	3,438,206	52,895	Illiquid	Illiquid
CZK-JPY_1 week	1	0.02	761	12	Illiquid	Illiquid
CZK-JPY_3 months	3	0.05	1,106,050	17,016	Illiquid	Illiquid
CZK-NOK_1 month	2	0.03	729,206	11,219	Illiquid	Illiquid
CZK-NOK_3 months	1	0.02	5,467,447	84,115	Illiquid	Illiquid
CZK-PLN_<1 week	9	0.14	859,999	13,231	Illiquid	Illiquid
CZK-PLN_1 week	2	0.03	21,906	337	Illiquid	Illiquid
CZK-PLN_1 month	1	0.02	4,775,509	73,469	Illiquid	Illiquid
CZK-PLN_3 months	2	0.03	477,551	7,347	Illiquid	Illiquid
CZK-PLN_6 months	2	0.03	920,676	14,164	Illiquid	Illiquid
CZK-PLN_1 year	3	0.05	1,491,870	22,952	Illiquid	Illiquid
CZK-PLN_2 years	2	0.03	601,595	9,255	Illiquid	Illiquid
CZK-SEK_<1 week	3	0.05	2,086,862	32,106	Illiquid	Illiquid
CZK-SEK_1 week	2	0.03	140,707	2,165	Illiquid	Illiquid
CZK-SEK_1 month	8	0.12	11,976,176	184,249	Illiquid	Illiquid
CZK-SEK_3 months	9	0.14	25,426,407	391,175	Illiquid	Illiquid
CZK-SEK_6 months	5	0.08	7,191,793	110,643	Illiquid	Illiquid
CZK-SEK_1 year	4	0.06	118,496	1,823	Illiquid	Illiquid
CZK-SEK_4 years	1	0.02	7,292	112	Illiquid	Illiquid
CZK-USD_<1 week	35	0.54	36,144,742	556,073	Illiquid	Illiquid
CZK-USD_1 week	35	0.54	82,297,019	1,266,108	Illiquid	Illiquid
CZK-USD_1 month	53	0.82	87,538,801	1,346,751	Illiquid	Illiquid
CZK-USD_3 months	100	1.54	163,976,398	2,522,714	Illiquid	Illiquid
CZK-USD_6 months	17	0.26	38,071,030	585,708	Illiquid	Illiquid
CZK-USD_1 year	11	0.17	19,668,311	302,589	Illiquid	Illiquid
CZK-USD_2 years	7	0.11	688,971	10,600	Illiquid	Illiquid
DKK-EUR_<1 week	136	2.09	622,508,665	9,577,056	Illiquid	Illiquid
DKK-EUR_1 week	125	1.92	575,673,885	8,856,521	Illiquid	Illiquid
DKK-EUR_1 month	378	5.82	1,087,003,816	16,723,136	Liquid	Liquid
DKK-EUR_3 months	273	4.20	1,055,025,225	16,231,157	Liquid	Liquid
DKK-EUR_6 months	26	0.40	347,759,312	5,350,143	Illiquid	Illiquid
DKK-EUR_1 year	36	0.55	931,258,205	14,327,049	Illiquid	Illiquid
DKK-EUR_2 years	24	0.37	502,617,025	7,732,570	Illiquid	Illiquid
DKK-EUR_3 years	8	0.12	155,814,118	2,397,140	Illiquid	Illiquid
DKK-GBP_<1 week	39	0.60	17,862,272	274,804	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
DKK-GBP__1 week	37	0.57	38,168,605	587,209	Illiquid	Illiquid
DKK-GBP__1 month	106	1.63	87,698,204	1,349,203	Illiquid	Illiquid
DKK-GBP__3 months	44	0.68	246,614,642	3,794,071	Illiquid	Illiquid
DKK-GBP__6 months	25	0.38	51,508,834	792,444	Illiquid	Illiquid
DKK-GBP__1 year	32	0.49	47,106,104	724,709	Illiquid	Illiquid
DKK-GBP__2 years	2	0.03	1,740,349	26,775	Illiquid	Illiquid
DKK-HKD__<1 week	1	0.02	46,753	719	Illiquid	Illiquid
DKK-HKD__3 months	3	0.05	1,313,316	20,205	Illiquid	Illiquid
DKK-JPY__<1 week	3	0.05	1,735,957	26,707	Illiquid	Illiquid
DKK-JPY__1 week	3	0.05	509,046	7,831	Illiquid	Illiquid
DKK-JPY__1 month	75	1.15	68,710,402	1,057,083	Illiquid	Illiquid
DKK-JPY__3 months	38	0.58	115,225,430	1,772,699	Illiquid	Illiquid
DKK-JPY__6 months	3	0.05	8,913,219	137,126	Illiquid	Illiquid
DKK-JPY__1 year	8	0.12	12,438,038	191,354	Illiquid	Illiquid
DKK-LTL__1 week	1	0.02	6,950	107	Illiquid	Illiquid
DKK-MXN__3 months	2	0.03	5,601,274	86,173	Illiquid	Illiquid
DKK-MXN__1 year	1	0.02	5,550,025	85,385	Illiquid	Illiquid
DKK-NOK__<1 week	25	0.38	54,493,136	838,356	Illiquid	Illiquid
DKK-NOK__1 week	47	0.72	163,910,827	2,521,705	Illiquid	Illiquid
DKK-NOK__1 month	42	0.65	18,472,317	284,189	Illiquid	Illiquid
DKK-NOK__3 months	91	1.40	43,739,098	672,909	Illiquid	Illiquid
DKK-NOK__6 months	19	0.29	6,622,456	101,884	Illiquid	Illiquid
DKK-NOK__1 year	13	0.20	4,292,692	66,041	Illiquid	Illiquid
DKK-NOK__2 years	1	0.02	46,413	714	Illiquid	Illiquid
DKK-NZD__1 month	1	0.02	665,897	10,245	Illiquid	Illiquid
DKK-PLN__1 week	1	0.02	1,193,877	18,367	Illiquid	Illiquid
DKK-PLN__1 month	5	0.08	5,842,231	89,880	Illiquid	Illiquid
DKK-PLN__3 months	3	0.05	9,789,793	150,612	Illiquid	Illiquid
DKK-RON__<1 week	1	0.02	986,567	15,178	Illiquid	Illiquid
DKK-RON__1 week	1	0.02	986,567	15,178	Illiquid	Illiquid
DKK-RON__3 months	3	0.05	2,694,943	41,461	Illiquid	Illiquid
DKK-RUB__<1 week	8	0.12	34,554,827	531,613	Illiquid	Illiquid
DKK-RUB__1 week	5	0.08	32,097,799	493,812	Illiquid	Illiquid
DKK-RUB__3 months	9	0.14	61,683,241	948,973	Illiquid	Illiquid
DKK-SEK__<1 week	71	1.09	12,826,714	197,334	Illiquid	Illiquid
DKK-SEK__1 week	171	2.63	62,177,231	956,573	Illiquid	Illiquid
DKK-SEK__1 month	139	2.14	56,707,289	872,420	Illiquid	Illiquid
DKK-SEK__3 months	130	2.00	300,298,742	4,619,981	Illiquid	Illiquid
DKK-SEK__6 months	21	0.32	293,336,635	4,512,871	Illiquid	Illiquid
DKK-SEK__1 year	19	0.29	35,232,283	542,035	Illiquid	Illiquid
DKK-SEK__2 years	5	0.08	3,871,650	59,564	Illiquid	Illiquid
DKK-SGD__1 week	1	0.02	605,225	9,311	Illiquid	Illiquid
DKK-SGD__3 months	1	0.02	124,192	1,911	Illiquid	Illiquid
DKK-THB__<1 week	6	0.09	68,029	1,047	Illiquid	Illiquid
DKK-THB__1 week	6	0.09	41,640	641	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
DKK-THB__1 month	1	0.02	3,288	51	Illiquid	Illiquid
DKK-THB__6 months	2	0.03	650,068	10,001	Illiquid	Illiquid
DKK-THB__1 year	1	0.02	782,940	12,045	Illiquid	Illiquid
DKK-TRY__<1 week	3	0.05	3,465,182	53,310	Illiquid	Illiquid
DKK-TRY__1 week	1	0.02	1,112,210	17,111	Illiquid	Illiquid
DKK-TRY__1 month	4	0.06	642,125	9,879	Illiquid	Illiquid
DKK-TRY__3 months	10	0.15	3,219,489	49,531	Illiquid	Illiquid
DKK-TRY__6 months	1	0.02	135,184	2,080	Illiquid	Illiquid
DKK-TRY__1 year	2	0.03	405,552	6,239	Illiquid	Illiquid
DKK-USD__<1 week	60	0.92	107,818,959	1,658,753	Illiquid	Illiquid
DKK-USD__1 week	73	1.12	242,652,344	3,733,113	Illiquid	Illiquid
DKK-USD__1 month	276	4.25	1,477,821,290	22,735,712	Liquid	Illiquid
DKK-USD__3 months	170	2.62	382,293,734	5,881,442	Illiquid	Illiquid
DKK-USD__6 months	51	0.78	158,570,138	2,439,541	Illiquid	Illiquid
DKK-USD__1 year	97	1.49	937,332,868	14,420,506	Liquid	Illiquid
DKK-USD__2 years	48	0.74	313,099,010	4,816,908	Illiquid	Illiquid
DKK-USD__3 years	7	0.11	2,207,191	33,957	Illiquid	Illiquid
DKK-ZAR__1 week	2	0.03	239,890	3,691	Illiquid	Illiquid
DKK-ZAR__1 month	2	0.03	241,913	3,722	Illiquid	Illiquid
DKK-ZAR__3 months	4	0.06	325,506	5,008	Illiquid	Illiquid
EUR-AED__<1 week	16	0.25	26,948,315	414,589	Illiquid	Illiquid
EUR-AED__1 week	23	0.35	19,808,144	304,741	Illiquid	Illiquid
EUR-AED__1 month	48	0.74	84,195,049	1,295,308	Illiquid	Illiquid
EUR-AED__3 months	32	0.49	41,913,697	644,826	Illiquid	Illiquid
EUR-AED__6 months	9	0.14	8,897,494	136,885	Illiquid	Illiquid
EUR-AED__1 year	16	0.25	10,090,629	155,240	Illiquid	Illiquid
EUR-AED__2 years	25	0.38	8,182,547	125,885	Illiquid	Illiquid
EUR-AED__3 years	4	0.06	200,554	3,085	Illiquid	Illiquid
EUR-AED__4 years	4	0.06	203,743	3,135	Illiquid	Illiquid
EUR-ARS__<1 week	8	0.12	5,132,104	78,955	Illiquid	Illiquid
EUR-ARS__1 month	5	0.08	4,651,572	71,563	Illiquid	Illiquid
EUR-ARS__3 months	1	0.02	144,686	2,226	Illiquid	Illiquid
EUR-AUD__<1 week	10	0.15	5,942,343	91,421	Illiquid	Illiquid
EUR-AUD__1 week	3	0.05	1,275,831	19,628	Illiquid	Illiquid
EUR-AUD__1 month	20	0.31	12,734,674	195,918	Illiquid	Illiquid
EUR-AUD__3 months	27	0.42	13,406,798	206,258	Illiquid	Illiquid
EUR-AUD__6 months	2	0.03	342,791	5,274	Illiquid	Illiquid
EUR-BGN__<1 week	2	0.03	1,023,113	15,740	Illiquid	Illiquid
EUR-BGN__1 month	3	0.05	13,322,599	204,963	Illiquid	Illiquid
EUR-BGN__3 months	7	0.11	55,337,611	851,348	Illiquid	Illiquid
EUR-BGN__6 months	4	0.06	19,193,070	295,278	Illiquid	Illiquid
EUR-BGN__1 year	1	0.02	8,611,906	132,491	Illiquid	Illiquid
EUR-CAD__<1 week	4	0.06	5,698,796	87,674	Illiquid	Illiquid
EUR-CAD__1 week	2	0.03	883,841	13,598	Illiquid	Illiquid
EUR-CAD__1 month	7	0.11	6,648,596	102,286	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-CAD_3 months	15	0.23	7,746,801	119,182	Illiquid	Illiquid
EUR-CHF_<1 week	5	0.08	8,745,859	134,552	Illiquid	Illiquid
EUR-CHF_1 week	2	0.03	337,450	5,192	Illiquid	Illiquid
EUR-CHF_1 month	13	0.20	10,917,051	167,955	Illiquid	Illiquid
EUR-CHF_3 months	40	0.62	10,341,084	159,094	Illiquid	Illiquid
EUR-CHF_6 months	1	0.02	49,054	755	Illiquid	Illiquid
EUR-CHF_2 years	1	0.02	500,000	7,692	Illiquid	Illiquid
EUR-CNH_<1 week	2	0.03	913,318	14,051	Illiquid	Illiquid
EUR-CNH_1 week	6	0.09	25,516,735	392,565	Illiquid	Illiquid
EUR-CNH_1 month	19	0.29	122,299,964	1,881,538	Illiquid	Illiquid
EUR-CNH_3 months	11	0.17	17,638,715	271,365	Illiquid	Illiquid
EUR-CNH_6 months	26	0.40	51,468,336	791,821	Illiquid	Illiquid
EUR-CNH_1 year	7	0.11	20,568,297	316,435	Illiquid	Illiquid
EUR-CNH_2 years	11	0.17	8,064,752	124,073	Illiquid	Illiquid
EUR-CZK_1 month	3	0.05	1,082,871	16,660	Illiquid	Illiquid
EUR-CZK_3 months	1	0.02	473,984	7,292	Illiquid	Illiquid
EUR-DKK_<1 week	5	0.08	11,362,972	174,815	Illiquid	Illiquid
EUR-DKK_1 week	2	0.03	71,003	1,092	Illiquid	Illiquid
EUR-DKK_1 month	36	0.55	142,331,187	2,189,711	Illiquid	Illiquid
EUR-DKK_3 months	46	0.71	83,603,448	1,286,207	Illiquid	Illiquid
EUR-DKK_6 months	2	0.03	5,239,265	80,604	Illiquid	Illiquid
EUR-EGP_3 months	2	0.03	468,310	7,205	Illiquid	Illiquid
EUR-GBP_<1 week	1,159	17.83	10,894,587,094	167,609,032	Liquid	Liquid
EUR-GBP_1 week	839	12.91	4,256,340,322	65,482,159	Liquid	Liquid
EUR-GBP_1 month	2,214	34.06	9,294,871,253	142,998,019	Liquid	Liquid
EUR-GBP_3 months	2,838	43.66	53,110,956,735	817,091,642	Liquid	Liquid
EUR-GBP_6 months	1,024	15.75	17,802,188,064	273,879,816	Liquid	Liquid
EUR-GBP_1 year	614	9.45	2,361,269,356	36,327,221	Liquid	Liquid
EUR-GBP_2 years	277	4.26	600,855,517	9,243,931	Illiquid	Illiquid
EUR-GBP_3 years	46	0.71	65,634,802	1,009,766	Illiquid	Illiquid
EUR-GBP_4 years	4	0.06	2,990,098	46,002	Illiquid	Illiquid
EUR-GBP_5 years	3	0.05	3,017,189	46,418	Illiquid	Illiquid
EUR-GHS_<1 week	5	0.08	45,302,926	696,968	Illiquid	Illiquid
EUR-GHS_3 months	2	0.03	63,123	971	Illiquid	Illiquid
EUR-GHS_6 months	7	0.11	22,924,116	352,679	Illiquid	Illiquid
EUR-HKD_<1 week	168	2.58	201,811,472	3,104,792	Illiquid	Illiquid
EUR-HKD_1 week	66	1.02	207,338,128	3,189,817	Illiquid	Illiquid
EUR-HKD_1 month	246	3.78	264,877,463	4,075,038	Illiquid	Illiquid
EUR-HKD_3 months	292	4.49	714,018,300	10,984,897	Liquid	Illiquid
EUR-HKD_6 months	52	0.80	157,254,618	2,419,302	Illiquid	Illiquid
EUR-HKD_1 year	79	1.22	512,634,268	7,886,681	Illiquid	Illiquid
EUR-HKD_2 years	22	0.34	38,322,168	589,572	Illiquid	Illiquid
EUR-HRK_<1 week	32	0.49	76,364,893	1,174,845	Illiquid	Illiquid
EUR-HRK_1 week	61	0.94	163,456,468	2,514,715	Illiquid	Illiquid
EUR-HRK_1 month	105	1.62	294,897,300	4,536,882	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-HRK_3 months	223	3.43	96,259,683	1,480,918	Illiquid	Illiquid
EUR-HRK_6 months	20	0.31	57,821,922	889,568	Illiquid	Illiquid
EUR-HRK_1 year	9	0.14	42,728,589	657,363	Illiquid	Illiquid
EUR-HRK_2 years	1	0.02	5,000,000	76,923	Illiquid	Illiquid
EUR-HUF_<1 week	177	2.72	130,318,039	2,004,893	Illiquid	Illiquid
EUR-HUF_1 week	380	5.85	166,908,983	2,567,831	Illiquid	Illiquid
EUR-HUF_1 month	777	11.95	631,318,772	9,712,596	Illiquid	Illiquid
EUR-HUF_3 months	871	13.40	700,322,441	10,774,191	Liquid	Illiquid
EUR-HUF_6 months	312	4.80	538,565,364	8,285,621	Illiquid	Illiquid
EUR-HUF_1 year	257	3.95	126,015,918	1,938,706	Illiquid	Illiquid
EUR-HUF_2 years	62	0.95	57,477,088	884,263	Illiquid	Illiquid
EUR-HUF_3 years	6	0.09	6,184,484	95,146	Illiquid	Illiquid
EUR-IDR_<1 week	11	0.17	14,104,725	216,996	Illiquid	Illiquid
EUR-IDR_1 month	13	0.20	15,896,575	244,563	Illiquid	Illiquid
EUR-IDR_3 months	11	0.17	20,265,232	311,773	Illiquid	Illiquid
EUR-IDR_2 years	4	0.06	38,652,990	594,661	Illiquid	Illiquid
EUR-ILS_<1 week	18	0.28	10,083,474	155,130	Illiquid	Illiquid
EUR-ILS_1 week	10	0.15	24,854,338	382,374	Illiquid	Illiquid
EUR-ILS_1 month	25	0.38	46,610,704	717,088	Illiquid	Illiquid
EUR-ILS_3 months	24	0.37	105,021,649	1,615,718	Illiquid	Illiquid
EUR-ILS_6 months	1	0.02	11,910,389	183,237	Illiquid	Illiquid
EUR-ILS_1 year	7	0.11	6,450,059	99,232	Illiquid	Illiquid
EUR-ILS_2 years	1	0.02	1,461,464	22,484	Illiquid	Illiquid
EUR-INR_<1 week	7	0.11	2,607,204,495	40,110,838	Illiquid	Illiquid
EUR-INR_1 week	14	0.22	1,494,823,896	22,997,291	Illiquid	Illiquid
EUR-INR_1 month	17	0.26	211,492,728	3,253,734	Illiquid	Illiquid
EUR-INR_3 months	11	0.17	21,504,542	330,839	Illiquid	Illiquid
EUR-INR_6 months	11	0.17	32,111,212	494,019	Illiquid	Illiquid
EUR-INR_1 year	19	0.29	63,063,994	970,215	Illiquid	Illiquid
EUR-JPY_<1 week	371	5.71	1,086,594,274	16,716,835	Liquid	Liquid
EUR-JPY_1 week	274	4.22	995,107,897	15,309,352	Liquid	Liquid
EUR-JPY_1 month	996	15.32	4,361,745,368	67,103,775	Liquid	Liquid
EUR-JPY_3 months	1,332	20.49	9,434,103,952	145,140,061	Liquid	Liquid
EUR-JPY_6 months	392	6.03	1,806,510,520	27,792,470	Liquid	Liquid
EUR-JPY_1 year	196	3.02	197,669,102	3,041,063	Illiquid	Illiquid
EUR-JPY_2 years	110	1.69	175,656,569	2,702,409	Illiquid	Illiquid
EUR-JPY_16 years	2	0.03	171,840,000	2,643,692	Illiquid	Illiquid
EUR-KRW_<1 week	29	0.45	67,072,398	1,031,883	Illiquid	Illiquid
EUR-KRW_1 week	4	0.06	7,934,404	122,068	Illiquid	Illiquid
EUR-KRW_1 month	32	0.49	63,169,332	971,836	Illiquid	Illiquid
EUR-KRW_3 months	46	0.71	105,950,742	1,630,011	Illiquid	Illiquid
EUR-KRW_6 months	7	0.11	13,179,901	202,768	Illiquid	Illiquid
EUR-KRW_1 year	11	0.17	15,044,912	231,460	Illiquid	Illiquid
EUR-KRW_2 years	1	0.02	2,000,000	30,769	Illiquid	Illiquid
EUR-KWD_1 month	1	0.02	437,969	6,738	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-KWD_3 months	1	0.02	386,443	5,945	Illiquid	Illiquid
EUR-KWD_1 year	3	0.05	10,129,982	155,846	Illiquid	Illiquid
EUR-KWD_2 years	3	0.05	11,422,617	175,733	Illiquid	Illiquid
EUR-KWD_3 years	3	0.05	2,300,180	35,387	Illiquid	Illiquid
EUR-KZT_1 week	2	0.03	1,148,751	17,673	Illiquid	Illiquid
EUR-KZT_1 month	2	0.03	474,234	7,296	Illiquid	Illiquid
EUR-KZT_3 months	3	0.05	2,448,065	37,663	Illiquid	Illiquid
EUR-LTL_<1 week	4	0.06	2,056,264	31,635	Illiquid	Illiquid
EUR-LTL_1 week	1	0.02	4,923,826	75,751	Illiquid	Illiquid
EUR-LTL_1 month	1	0.02	579,136	8,910	Illiquid	Illiquid
EUR-LTL_3 months	3	0.05	1,824,518	28,070	Illiquid	Illiquid
EUR-LTL_6 months	1	0.02	125,698	1,934	Illiquid	Illiquid
EUR-MAD_<1 week	1	0.02	6,965,496	107,161	Illiquid	Illiquid
EUR-MAD_1 week	1	0.02	71,082	1,094	Illiquid	Illiquid
EUR-MAD_1 month	5	0.08	15,100,000	232,308	Illiquid	Illiquid
EUR-MAD_6 months	1	0.02	6,925,494	106,546	Illiquid	Illiquid
EUR-MAD_1 year	1	0.02	261,324	4,020	Illiquid	Illiquid
EUR-MAD_2 years	7	0.11	1,786,410	27,483	Illiquid	Illiquid
EUR-MUR_1 week	1	0.02	724,900	11,152	Illiquid	Illiquid
EUR-MUR_1 month	4	0.06	2,660,617	40,933	Illiquid	Illiquid
EUR-MXN_<1 week	36	0.55	171,819,489	2,643,377	Illiquid	Illiquid
EUR-MXN_1 week	31	0.48	26,942,470	414,500	Illiquid	Illiquid
EUR-MXN_1 month	126	1.94	369,718,349	5,687,975	Illiquid	Illiquid
EUR-MXN_3 months	145	2.23	328,098,220	5,047,665	Illiquid	Illiquid
EUR-MXN_6 months	12	0.18	227,894,637	3,506,071	Illiquid	Illiquid
EUR-MXN_1 year	12	0.18	127,911,574	1,967,870	Illiquid	Illiquid
EUR-MXN_2 years	3	0.05	23,747,517	365,346	Illiquid	Illiquid
EUR-MYR_<1 week	1	0.02	299,113	4,602	Illiquid	Illiquid
EUR-MYR_1 month	3	0.05	2,028,146	31,202	Illiquid	Illiquid
EUR-MYR_3 months	2	0.03	502,373	7,729	Illiquid	Illiquid
EUR-MYR_6 months	1	0.02	327,905	5,045	Illiquid	Illiquid
EUR-MYR_2 years	2	0.03	883,394	13,591	Illiquid	Illiquid
EUR-NGN_<1 week	11	0.17	3,910,303,088	60,158,509	Illiquid	Illiquid
EUR-NGN_1 week	1	0.02	197,221	3,034	Illiquid	Illiquid
EUR-NGN_1 year	8	0.12	36,662,460	564,038	Illiquid	Illiquid
EUR-NOK_<1 week	198	3.05	219,318,401	3,374,129	Illiquid	Illiquid
EUR-NOK_1 week	452	6.95	1,171,975,490	18,030,392	Liquid	Liquid
EUR-NOK_1 month	691	10.63	1,848,832,040	28,443,570	Liquid	Liquid
EUR-NOK_3 months	1,317	20.26	2,062,968,444	31,737,976	Liquid	Liquid
EUR-NOK_6 months	128	1.97	425,213,115	6,541,740	Illiquid	Illiquid
EUR-NOK_1 year	70	1.08	126,287,343	1,942,882	Illiquid	Illiquid
EUR-NOK_2 years	103	1.58	69,312,800	1,066,351	Illiquid	Illiquid
EUR-NOK_3 years	17	0.26	9,159,788	140,920	Illiquid	Illiquid
EUR-NOK_4 years	8	0.12	3,288,315	50,589	Illiquid	Illiquid
EUR-NZD_<1 week	41	0.63	32,156,098	494,709	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-NZD__1 week	39	0.60	23,160,889	356,321	Illiquid	Illiquid
EUR-NZD__1 month	90	1.38	87,810,293	1,350,928	Illiquid	Illiquid
EUR-NZD__3 months	93	1.43	198,838,572	3,059,055	Illiquid	Illiquid
EUR-NZD__6 months	36	0.55	83,457,369	1,283,960	Illiquid	Illiquid
EUR-NZD__1 year	38	0.58	23,223,084	357,278	Illiquid	Illiquid
EUR-NZD__2 years	27	0.42	5,262,825	80,967	Illiquid	Illiquid
EUR-OMR__1 week	2	0.03	2,887,397	44,421	Illiquid	Illiquid
EUR-OMR__1 month	4	0.06	8,329,595	128,148	Illiquid	Illiquid
EUR-OMR__3 months	2	0.03	7,055,773	108,550	Illiquid	Illiquid
EUR-PEN__<1 week	5	0.08	12,015,030	184,847	Illiquid	Illiquid
EUR-PEN__1 month	5	0.08	7,360,550	113,239	Illiquid	Illiquid
EUR-PEN__3 months	1	0.02	4,527,228	69,650	Illiquid	Illiquid
EUR-PHP__<1 week	2	0.03	479,794	7,381	Illiquid	Illiquid
EUR-PHP__1 month	3	0.05	597,257	9,189	Illiquid	Illiquid
EUR-PHP__3 months	6	0.09	4,314,264	66,373	Illiquid	Illiquid
EUR-PHP__6 months	4	0.06	3,193,581	49,132	Illiquid	Illiquid
EUR-PHP__1 year	8	0.12	6,230,151	95,848	Illiquid	Illiquid
EUR-PLN__<1 week	242	3.72	452,059,625	6,954,763	Illiquid	Illiquid
EUR-PLN__1 week	123	1.89	312,361,550	4,805,562	Illiquid	Illiquid
EUR-PLN__1 month	451	6.94	1,153,056,026	17,739,323	Liquid	Liquid
EUR-PLN__3 months	630	9.69	953,449,646	14,668,456	Liquid	Liquid
EUR-PLN__6 months	222	3.42	301,953,829	4,645,444	Illiquid	Illiquid
EUR-PLN__1 year	168	2.58	144,685,466	2,225,930	Illiquid	Illiquid
EUR-PLN__2 years	70	1.08	154,482,205	2,376,649	Illiquid	Illiquid
EUR-PLN__3 years	2	0.03	120,000	1,846	Illiquid	Illiquid
EUR-QAR__1 week	1	0.02	8,909,801	137,074	Illiquid	Illiquid
EUR-QAR__1 month	5	0.08	15,058,571	231,670	Illiquid	Illiquid
EUR-QAR__3 months	3	0.05	18,968,253	291,819	Illiquid	Illiquid
EUR-QAR__6 months	10	0.15	62,845,238	966,850	Illiquid	Illiquid
EUR-QAR__1 year	3	0.05	3,827,014	58,877	Illiquid	Illiquid
EUR-QAR__2 years	4	0.06	3,330,175	51,233	Illiquid	Illiquid
EUR-QAR__3 years	2	0.03	1,499,538	23,070	Illiquid	Illiquid
EUR-RON__<1 week	48	0.74	71,763,317	1,104,051	Illiquid	Illiquid
EUR-RON__1 week	80	1.23	92,304,787	1,420,074	Illiquid	Illiquid
EUR-RON__1 month	161	2.48	304,362,110	4,682,494	Illiquid	Illiquid
EUR-RON__3 months	107	1.65	307,449,999	4,730,000	Illiquid	Illiquid
EUR-RON__6 months	47	0.72	193,829,466	2,981,992	Illiquid	Illiquid
EUR-RON__1 year	88	1.35	30,776,136	473,479	Illiquid	Illiquid
EUR-RON__2 years	24	0.37	10,302,565	158,501	Illiquid	Illiquid
EUR-RSD__<1 week	1	0.02	3,471	53	Illiquid	Illiquid
EUR-RSD__1 month	3	0.05	1,012,637	15,579	Illiquid	Illiquid
EUR-RSD__3 months	1	0.02	10,366,896	159,491	Illiquid	Illiquid
EUR-RUB__<1 week	130	2.00	735,740,845	11,319,090	Liquid	Liquid
EUR-RUB__1 week	89	1.37	526,001,508	8,092,331	Illiquid	Liquid
EUR-RUB__1 month	205	3.15	1,326,793,190	20,412,203	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-RUB_3 months	367	5.65	2,341,506,243	36,023,173	Liquid	Liquid
EUR-RUB_6 months	128	1.97	146,243,786	2,249,904	Illiquid	Illiquid
EUR-RUB_1 year	116	1.78	294,078,460	4,524,284	Illiquid	Illiquid
EUR-RUB_2 years	15	0.23	27,124,997	417,308	Illiquid	Illiquid
EUR-SAR_<1 week	16	0.25	57,492,396	884,498	Illiquid	Illiquid
EUR-SAR_1 week	11	0.17	71,035,173	1,092,849	Illiquid	Illiquid
EUR-SAR_1 month	37	0.57	57,217,360	880,267	Illiquid	Illiquid
EUR-SAR_3 months	14	0.22	165,925,262	2,552,696	Illiquid	Illiquid
EUR-SAR_6 months	3	0.05	2,254,119	34,679	Illiquid	Illiquid
EUR-SAR_1 year	4	0.06	2,305,688	35,472	Illiquid	Illiquid
EUR-SAR_2 years	3	0.05	25,318,152	389,510	Illiquid	Illiquid
EUR-SEK_<1 week	632	9.72	7,447,628,185	114,578,895	Liquid	Liquid
EUR-SEK_1 week	898	13.82	2,861,233,549	44,018,978	Liquid	Liquid
EUR-SEK_1 month	1,640	25.23	4,256,568,192	65,485,664	Liquid	Liquid
EUR-SEK_3 months	2,052	31.57	8,390,022,675	129,077,272	Liquid	Liquid
EUR-SEK_6 months	639	9.83	1,901,126,186	29,248,095	Liquid	Liquid
EUR-SEK_1 year	564	8.68	1,040,913,684	16,014,057	Liquid	Liquid
EUR-SEK_2 years	399	6.14	448,241,372	6,896,021	Illiquid	Illiquid
EUR-SEK_3 years	160	2.46	152,753,181	2,350,049	Illiquid	Illiquid
EUR-SEK_4 years	151	2.32	122,842,191	1,889,880	Illiquid	Illiquid
EUR-SEK_5 years	92	1.42	113,099,246	1,739,988	Illiquid	Illiquid
EUR-SEK_6 years	46	0.71	113,999,999	1,753,846	Illiquid	Illiquid
EUR-SEK_7 years	6	0.09	60,233,115	926,663	Illiquid	Illiquid
EUR-SGD_<1 week	62	0.95	215,100,276	3,309,235	Illiquid	Illiquid
EUR-SGD_1 week	59	0.91	82,870,742	1,274,934	Illiquid	Illiquid
EUR-SGD_1 month	205	3.15	263,072,385	4,047,267	Illiquid	Illiquid
EUR-SGD_3 months	161	2.48	388,748,194	5,980,741	Illiquid	Illiquid
EUR-SGD_6 months	32	0.49	50,174,629	771,917	Illiquid	Illiquid
EUR-SGD_1 year	40	0.62	135,578,538	2,085,824	Illiquid	Illiquid
EUR-SGD_2 years	37	0.57	60,273,130	927,279	Illiquid	Illiquid
EUR-SGD_3 years	3	0.05	28,546,391	439,175	Illiquid	Illiquid
EUR-THB_<1 week	21	0.32	11,922,734	183,427	Illiquid	Illiquid
EUR-THB_1 week	26	0.40	18,812,730	289,427	Illiquid	Illiquid
EUR-THB_1 month	48	0.74	46,343,015	712,969	Illiquid	Illiquid
EUR-THB_3 months	48	0.74	80,242,609	1,234,502	Illiquid	Illiquid
EUR-THB_6 months	16	0.25	17,128,218	263,511	Illiquid	Illiquid
EUR-THB_1 year	28	0.43	11,570,170	178,003	Illiquid	Illiquid
EUR-THB_2 years	15	0.23	11,442,601	176,040	Illiquid	Illiquid
EUR-TND_6 months	1	0.02	221,239	3,404	Illiquid	Illiquid
EUR-TND_1 year	3	0.05	997,652	15,348	Illiquid	Illiquid
EUR-TND_2 years	1	0.02	1,287,554	19,809	Illiquid	Illiquid
EUR-TRY_<1 week	71	1.09	119,227,836	1,834,274	Illiquid	Illiquid
EUR-TRY_1 week	74	1.14	110,725,162	1,703,464	Illiquid	Illiquid
EUR-TRY_1 month	182	2.80	327,038,136	5,031,356	Illiquid	Illiquid
EUR-TRY_3 months	185	2.85	333,700,694	5,133,857	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-TRY_6 months	64	0.98	96,726,524	1,488,100	Illiquid	Illiquid
EUR-TRY_1 year	33	0.51	30,838,958	474,446	Illiquid	Illiquid
EUR-TRY_2 years	5	0.08	3,905,779	60,089	Illiquid	Illiquid
EUR-TWD_<1 week	47	0.72	198,968,288	3,061,051	Illiquid	Illiquid
EUR-TWD_1 week	2	0.03	3,245,069	49,924	Illiquid	Illiquid
EUR-TWD_1 month	27	0.42	95,872,971	1,474,969	Illiquid	Illiquid
EUR-TWD_3 months	16	0.25	70,146,717	1,079,180	Illiquid	Illiquid
EUR-UGX_1 week	1	0.02	1,600,000	24,615	Illiquid	Illiquid
EUR-USD_<1 week	3,070	47.23	16,117,749,666	247,965,379	Liquid	Liquid
EUR-USD_1 week	2,624	40.37	11,586,853,636	178,259,287	Liquid	Liquid
EUR-USD_1 month	7,553	116.20	25,051,041,484	385,400,638	Liquid	Liquid
EUR-USD_3 months	10,479	161.22	72,576,588,687	1,116,562,903	Liquid	Liquid
EUR-USD_6 months	5,462	84.03	19,046,003,398	293,015,437	Liquid	Liquid
EUR-USD_1 year	3,722	57.26	7,935,215,588	122,080,240	Liquid	Liquid
EUR-USD_2 years	1,384	21.29	3,730,066,898	57,385,645	Liquid	Liquid
EUR-USD_3 years	193	2.97	885,467,466	13,622,576	Liquid	Liquid
EUR-USD_4 years	31	0.48	60,740,171	934,464	Illiquid	Illiquid
EUR-USD_5 years	7	0.11	25,187,737	387,504	Illiquid	Illiquid
EUR-VND_1 month	1	0.02	413,889	6,368	Illiquid	Illiquid
EUR-VND_3 months	1	0.02	886,817	13,643	Illiquid	Illiquid
EUR-ZAR_<1 week	95	1.46	270,982,631	4,168,964	Illiquid	Illiquid
EUR-ZAR_1 week	63	0.97	87,551,593	1,346,948	Illiquid	Illiquid
EUR-ZAR_1 month	135	2.08	204,621,843	3,148,028	Illiquid	Illiquid
EUR-ZAR_3 months	184	2.83	125,451,443	1,930,022	Illiquid	Illiquid
EUR-ZAR_6 months	122	1.88	83,974,848	1,291,921	Illiquid	Illiquid
EUR-ZAR_1 year	94	1.45	22,198,840	341,521	Illiquid	Illiquid
EUR-ZAR_2 years	108	1.66	26,892,581	413,732	Illiquid	Illiquid
GBP-AED_<1 week	5	0.08	5,731,656	88,179	Illiquid	Illiquid
GBP-AED_1 week	9	0.14	824,986	12,692	Illiquid	Illiquid
GBP-AED_1 month	5	0.08	4,515,371	69,467	Illiquid	Illiquid
GBP-AED_3 months	3	0.05	6,145,282	94,543	Illiquid	Illiquid
GBP-AED_6 months	2	0.03	1,851,074	28,478	Illiquid	Illiquid
GBP-BRL_<1 week	2	0.03	9,617,572	147,963	Illiquid	Illiquid
GBP-CHF_1 month	1	0.02	606,751	9,335	Illiquid	Illiquid
GBP-CHF_3 months	1	0.02	1,561,690	24,026	Illiquid	Illiquid
GBP-CNY_1 month	3	0.05	114,533	1,762	Illiquid	Illiquid
GBP-CNY_3 months	1	0.02	5,253,785	80,827	Illiquid	Illiquid
GBP-CNY_6 months	8	0.12	2,292,719	35,273	Illiquid	Illiquid
GBP-CNY_1 year	1	0.02	174,869	2,690	Illiquid	Illiquid
GBP-HKD_<1 week	7	0.11	3,494,204	53,757	Illiquid	Illiquid
GBP-HKD_1 week	3	0.05	390,626	6,010	Illiquid	Illiquid
GBP-HKD_1 month	10	0.15	23,954,892	368,537	Illiquid	Illiquid
GBP-HKD_3 months	27	0.42	44,868,763	690,289	Illiquid	Illiquid
GBP-HKD_6 months	3	0.05	15,769,335	242,605	Illiquid	Illiquid
GBP-HKD_1 year	7	0.11	21,010,305	323,235	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-HRK__1 week	1	0.02	60,675	933	Illiquid	Illiquid
GBP-HRK__1 year	8	0.12	2,843,759	43,750	Illiquid	Illiquid
GBP-HUF__<1 week	20	0.31	5,962,956	91,738	Illiquid	Illiquid
GBP-HUF__1 week	27	0.42	12,711,939	195,568	Illiquid	Illiquid
GBP-HUF__1 month	16	0.25	8,838,031	135,970	Illiquid	Illiquid
GBP-HUF__3 months	24	0.37	20,181,652	310,487	Illiquid	Illiquid
GBP-HUF__6 months	6	0.09	2,815,745	43,319	Illiquid	Illiquid
GBP-HUF__1 year	12	0.18	16,097,137	247,648	Illiquid	Illiquid
GBP-ILS__<1 week	1	0.02	313,171	4,818	Illiquid	Illiquid
GBP-ILS__1 week	1	0.02	36,405	560	Illiquid	Illiquid
GBP-ILS__1 month	2	0.03	938,120	14,433	Illiquid	Illiquid
GBP-ILS__3 months	2	0.03	12,416,602	191,025	Illiquid	Illiquid
GBP-INR__<1 week	2	0.03	583,526	8,977	Illiquid	Illiquid
GBP-INR__1 month	5	0.08	1,883,571	28,978	Illiquid	Illiquid
GBP-INR__3 months	1	0.02	93,415	1,437	Illiquid	Illiquid
GBP-INR__6 months	1	0.02	71,427	1,099	Illiquid	Illiquid
GBP-JPY__<1 week	52	0.80	294,593,488	4,532,208	Illiquid	Illiquid
GBP-JPY__1 week	70	1.08	132,799,331	2,043,067	Illiquid	Illiquid
GBP-JPY__1 month	163	2.51	315,070,297	4,847,235	Illiquid	Illiquid
GBP-JPY__3 months	101	1.55	789,996,222	12,153,788	Liquid	Illiquid
GBP-JPY__6 months	46	0.71	788,633,033	12,132,816	Illiquid	Illiquid
GBP-JPY__1 year	47	0.72	222,478,536	3,422,747	Illiquid	Illiquid
GBP-JPY__2 years	1	0.02	13,591,727	209,103	Illiquid	Illiquid
GBP-LTL__1 month	1	0.02	18,978	292	Illiquid	Illiquid
GBP-LTL__3 months	2	0.03	82,125	1,263	Illiquid	Illiquid
GBP-MXN__<1 week	3	0.05	1,110,868	17,090	Illiquid	Illiquid
GBP-MXN__1 week	2	0.03	1,131,641	17,410	Illiquid	Illiquid
GBP-MXN__1 month	4	0.06	321,236	4,942	Illiquid	Illiquid
GBP-MXN__3 months	6	0.09	10,686,806	164,412	Illiquid	Illiquid
GBP-MXN__6 months	1	0.02	29,731	457	Illiquid	Illiquid
GBP-MXN__1 year	2	0.03	160,673	2,472	Illiquid	Illiquid
GBP-MXN__2 years	6	0.09	575,926	8,860	Illiquid	Illiquid
GBP-MYR__1 month	1	0.02	411,658	6,333	Illiquid	Illiquid
GBP-NOK__<1 week	46	0.71	57,537,105	885,186	Illiquid	Illiquid
GBP-NOK__1 week	84	1.29	33,847,253	520,727	Illiquid	Illiquid
GBP-NOK__1 month	42	0.65	126,257,583	1,942,424	Illiquid	Illiquid
GBP-NOK__3 months	47	0.72	145,348,006	2,236,123	Illiquid	Illiquid
GBP-NOK__6 months	24	0.37	62,233,598	957,440	Illiquid	Illiquid
GBP-NOK__1 year	4	0.06	3,033,753	46,673	Illiquid	Illiquid
GBP-NOK__2 years	3	0.05	546,076	8,401	Illiquid	Illiquid
GBP-NZD__<1 week	5	0.08	238,268	3,666	Illiquid	Illiquid
GBP-NZD__1 week	6	0.09	554,429	8,530	Illiquid	Illiquid
GBP-NZD__1 month	2	0.03	3,161,333	48,636	Illiquid	Illiquid
GBP-NZD__3 months	4	0.06	4,760,089	73,232	Illiquid	Illiquid
GBP-NZD__6 months	5	0.08	4,183,276	64,358	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-NZD__1 year	8	0.12	11,225,450	172,699	Illiquid	Illiquid
GBP-PLN__<1 week	9	0.14	8,551,867	131,567	Illiquid	Illiquid
GBP-PLN__1 week	29	0.45	1,809,764	27,843	Illiquid	Illiquid
GBP-PLN__1 month	5	0.08	186,485	2,869	Illiquid	Illiquid
GBP-PLN__3 months	12	0.18	12,878,376	198,129	Illiquid	Illiquid
GBP-PLN__6 months	15	0.23	91,764,374	1,411,760	Illiquid	Illiquid
GBP-PLN__1 year	13	0.20	3,159,104	48,602	Illiquid	Illiquid
GBP-PLN__2 years	24	0.37	40,252,987	619,277	Illiquid	Illiquid
GBP-RUB__1 week	1	0.02	8,159,228	125,527	Illiquid	Illiquid
GBP-RUB__1 month	5	0.08	25,913,911	398,676	Illiquid	Illiquid
GBP-RUB__3 months	14	0.22	75,809,426	1,166,299	Illiquid	Illiquid
GBP-RUB__1 year	18	0.28	19,608,435	301,668	Illiquid	Illiquid
GBP-SAR__1 week	1	0.02	104,423	1,607	Illiquid	Illiquid
GBP-SEK__<1 week	112	1.72	186,222,022	2,864,954	Illiquid	Illiquid
GBP-SEK__1 week	144	2.22	87,804,808	1,350,843	Illiquid	Illiquid
GBP-SEK__1 month	139	2.14	191,556,799	2,947,028	Illiquid	Illiquid
GBP-SEK__3 months	171	2.63	532,346,452	8,189,945	Illiquid	Illiquid
GBP-SEK__6 months	73	1.12	408,958,425	6,291,668	Illiquid	Illiquid
GBP-SEK__1 year	66	1.02	56,845,860	874,552	Illiquid	Illiquid
GBP-SEK__2 years	26	0.40	53,441,573	822,178	Illiquid	Illiquid
GBP-SEK__3 years	2	0.03	2,018,752	31,058	Illiquid	Illiquid
GBP-SEK__4 years	1	0.02	96,942	1,491	Illiquid	Illiquid
GBP-SEK__5 years	1	0.02	98,880	1,521	Illiquid	Illiquid
GBP-SEK__6 years	1	0.02	100,858	1,552	Illiquid	Illiquid
GBP-SGD__<1 week	18	0.28	1,915,661	29,472	Illiquid	Illiquid
GBP-SGD__1 week	11	0.17	477,815	7,351	Illiquid	Illiquid
GBP-SGD__1 month	3	0.05	3,755,906	57,783	Illiquid	Illiquid
GBP-SGD__3 months	23	0.35	69,861,698	1,074,795	Illiquid	Illiquid
GBP-SGD__6 months	3	0.05	3,132,137	48,187	Illiquid	Illiquid
GBP-SGD__1 year	5	0.08	11,175,070	171,924	Illiquid	Illiquid
GBP-SGD__2 years	2	0.03	4,854,005	74,677	Illiquid	Illiquid
GBP-THB__<1 week	10	0.15	53,381,058	821,247	Illiquid	Illiquid
GBP-THB__1 week	7	0.11	41,696,164	641,479	Illiquid	Illiquid
GBP-THB__1 month	1	0.02	8,091	124	Illiquid	Illiquid
GBP-THB__6 months	1	0.02	81,301,020	1,250,785	Illiquid	Illiquid
GBP-THB__1 year	3	0.05	9,789,674	150,610	Illiquid	Illiquid
GBP-TRY__<1 week	5	0.08	1,359,491	20,915	Illiquid	Illiquid
GBP-TRY__1 week	2	0.03	880,754	13,550	Illiquid	Illiquid
GBP-TRY__1 month	3	0.05	4,387,242	67,496	Illiquid	Illiquid
GBP-TRY__3 months	2	0.03	27,864,998	428,692	Illiquid	Illiquid
GBP-USD__<1 week	1,093	16.82	4,014,473,522	61,761,131	Liquid	Liquid
GBP-USD__1 week	1,298	19.97	4,423,685,124	68,056,694	Liquid	Liquid
GBP-USD__1 month	1,414	21.75	9,876,842,700	151,951,426	Liquid	Liquid
GBP-USD__3 months	1,683	25.89	19,888,479,956	305,976,615	Liquid	Liquid
GBP-USD__6 months	670	10.31	17,264,318,886	265,604,906	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-USD__1 year	466	7.17	2,557,186,587	39,341,332	Liquid	Liquid
GBP-USD__2 years	217	3.34	424,933,797	6,537,443	Illiquid	Illiquid
GBP-USD__3 years	66	1.02	58,831,074	905,093	Illiquid	Illiquid
GBP-USD__4 years	1	0.02	4,396,531	67,639	Illiquid	Illiquid
GBP-ZAR__<1 week	17	0.26	1,406,483	21,638	Illiquid	Illiquid
GBP-ZAR__1 week	18	0.28	3,503,142	53,894	Illiquid	Illiquid
GBP-ZAR__1 month	77	1.18	15,004,828	230,844	Illiquid	Illiquid
GBP-ZAR__3 months	14	0.22	35,912,787	552,504	Illiquid	Illiquid
GBP-ZAR__6 months	6	0.09	365,286	5,620	Illiquid	Illiquid
GBP-ZAR__1 year	13	0.20	2,397,319	36,882	Illiquid	Illiquid
GBP-ZAR__2 years	2	0.03	88,368	1,360	Illiquid	Illiquid
GHS-USD__6 months	3	0.05	19,753,672	303,903	Illiquid	Illiquid
GHS-USD__2 years	4	0.06	8,009,057	123,216	Illiquid	Illiquid
HKD-CZK__<1 week	1	0.02	244,984	3,769	Illiquid	Illiquid
HKD-JPY__<1 week	6	0.09	14,128,636	217,364	Illiquid	Illiquid
HKD-JPY__1 week	2	0.03	524,398	8,068	Illiquid	Illiquid
HKD-JPY__1 month	17	0.26	21,928,712	337,365	Illiquid	Illiquid
HKD-JPY__3 months	15	0.23	5,530,319	85,082	Illiquid	Illiquid
HKD-JPY__6 months	1	0.02	390,246	6,004	Illiquid	Illiquid
HKD-NOK__1 week	3	0.05	4,367,628	67,194	Illiquid	Illiquid
HKD-NOK__1 month	13	0.20	5,653,231	86,973	Illiquid	Illiquid
HKD-NOK__3 months	3	0.05	47,033	724	Illiquid	Illiquid
HKD-NOK__6 months	3	0.05	4,367,628	67,194	Illiquid	Illiquid
HKD-NZD__1 month	1	0.02	9,690	149	Illiquid	Illiquid
HKD-SEK__<1 week	2	0.03	510,713	7,857	Illiquid	Illiquid
HKD-SEK__1 week	6	0.09	9,402,743	144,658	Illiquid	Illiquid
HKD-SEK__1 month	11	0.17	11,153,485	171,592	Illiquid	Illiquid
HKD-SEK__3 months	9	0.14	23,151,888	356,183	Illiquid	Illiquid
HKD-SEK__6 months	5	0.08	89,067,353	1,370,267	Illiquid	Illiquid
HKD-SEK__1 year	1	0.02	280,516	4,316	Illiquid	Illiquid
HKD-SGD__<1 week	1	0.02	864,607	13,302	Illiquid	Illiquid
HKD-SGD__1 week	4	0.06	8,342,498	128,346	Illiquid	Illiquid
HKD-SGD__1 month	7	0.11	2,582,699	39,734	Illiquid	Illiquid
HKD-SGD__3 months	4	0.06	8,501,115	130,786	Illiquid	Illiquid
HKD-SGD__6 months	1	0.02	330,754	5,089	Illiquid	Illiquid
HKD-SGD__1 year	3	0.05	483,134	7,433	Illiquid	Illiquid
HKD-SGD__2 years	3	0.05	477,168	7,341	Illiquid	Illiquid
HKD-THB__<1 week	9	0.14	530,740	8,165	Illiquid	Illiquid
HKD-THB__1 week	3	0.05	98,309	1,512	Illiquid	Illiquid
HKD-THB__1 month	1	0.02	44,739	688	Illiquid	Illiquid
HKD-THB__3 months	1	0.02	49,213	757	Illiquid	Illiquid
HKD-USD__<1 week	173	2.66	548,874,835	8,444,228	Illiquid	Illiquid
HKD-USD__1 week	96	1.48	128,049,044	1,969,985	Illiquid	Illiquid
HKD-USD__1 month	110	1.69	708,992,276	10,907,573	Liquid	Illiquid
HKD-USD__3 months	130	2.00	183,706,141	2,826,248	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
HKD-USD__6 months	14	0.22	71,931,037	1,106,631	Illiquid	Illiquid
HKD-USD__1 year	6	0.09	41,152,699	633,118	Illiquid	Illiquid
HKD-USD__2 years	6	0.09	43,784,650	673,610	Illiquid	Illiquid
HKD-ZAR__<1 week	8	0.12	7,526,474	115,792	Illiquid	Illiquid
HKD-ZAR__1 month	1	0.02	51,781	797	Illiquid	Illiquid
HRK-SEK__1 week	1	0.02	38,987	600	Illiquid	Illiquid
HRK-SEK__1 month	3	0.05	115,692	1,780	Illiquid	Illiquid
HRK-SEK__3 months	1	0.02	2,950,242	45,388	Illiquid	Illiquid
HUF-JPY__1 week	5	0.08	1,028,830	15,828	Illiquid	Illiquid
HUF-JPY__3 months	1	0.02	922	14	Illiquid	Illiquid
HUF-JPY__6 months	1	0.02	1,327	20	Illiquid	Illiquid
HUF-JPY__1 year	1	0.02	2,263	35	Illiquid	Illiquid
HUF-NOK__1 month	1	0.02	34,020	523	Illiquid	Illiquid
HUF-PLN__<1 week	4	0.06	105,061	1,616	Illiquid	Illiquid
HUF-PLN__1 week	6	0.09	215,365	3,313	Illiquid	Illiquid
HUF-PLN__1 month	4	0.06	5,253,060	80,816	Illiquid	Illiquid
HUF-PLN__3 months	1	0.02	359,787	5,535	Illiquid	Illiquid
HUF-PLN__2 years	1	0.02	2,123,669	32,672	Illiquid	Illiquid
HUF-RON__1 month	5	0.08	124,450	1,915	Illiquid	Illiquid
HUF-RON__3 months	4	0.06	776,298	11,943	Illiquid	Illiquid
HUF-RUB__1 month	2	0.03	1,223,884	18,829	Illiquid	Illiquid
HUF-RUB__3 months	1	0.02	611,942	9,414	Illiquid	Illiquid
HUF-RUB__6 months	4	0.06	2,447,768	37,658	Illiquid	Illiquid
HUF-SEK__<1 week	1	0.02	1,624,327	24,990	Illiquid	Illiquid
HUF-SEK__1 week	2	0.03	587,117	9,033	Illiquid	Illiquid
HUF-SEK__1 month	11	0.17	2,344,941	36,076	Illiquid	Illiquid
HUF-SEK__3 months	6	0.09	4,199,740	64,611	Illiquid	Illiquid
HUF-SEK__1 year	1	0.02	578,260	8,896	Illiquid	Illiquid
HUF-TRY__<1 week	3	0.05	397,441	6,114	Illiquid	Illiquid
HUF-TRY__1 week	2	0.03	164,925	2,537	Illiquid	Illiquid
HUF-TRY__1 month	2	0.03	34,607,135	532,417	Illiquid	Illiquid
HUF-TRY__3 months	6	0.09	2,911,190	44,788	Illiquid	Illiquid
HUF-USD__<1 week	42	0.65	78,741,007	1,211,400	Illiquid	Illiquid
HUF-USD__1 week	59	0.91	40,313,608	620,209	Illiquid	Illiquid
HUF-USD__1 month	186	2.86	182,274,000	2,804,215	Illiquid	Illiquid
HUF-USD__3 months	222	3.42	218,337,332	3,359,036	Illiquid	Illiquid
HUF-USD__6 months	67	1.03	103,405,951	1,590,861	Illiquid	Illiquid
HUF-USD__1 year	57	0.88	31,127,496	478,885	Illiquid	Illiquid
HUF-USD__2 years	7	0.11	906,854	13,952	Illiquid	Illiquid
IDR-USD__<1 week	24	0.37	456,279,050	7,019,678	Illiquid	Illiquid
IDR-USD__1 week	6	0.09	2,734,127	42,063	Illiquid	Illiquid
IDR-USD__1 month	36	0.55	32,146,837	494,567	Illiquid	Illiquid
IDR-USD__3 months	47	0.72	33,264,926	511,768	Illiquid	Illiquid
IDR-USD__6 months	11	0.17	48,760,073	750,155	Illiquid	Illiquid
IDR-USD__1 year	18	0.28	20,382,738	313,581	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
ILS-JPY_<1 week	3	0.05	3,948,042	60,739	Illiquid	Illiquid
ILS-MXN_3 months	1	0.02	210,658	3,241	Illiquid	Illiquid
ILS-NOK_1 week	1	0.02	7,307	112	Illiquid	Illiquid
ILS-NOK_1 month	10	0.15	4,169,354	64,144	Illiquid	Illiquid
ILS-NOK_3 months	1	0.02	217,949	3,353	Illiquid	Illiquid
ILS-SEK_1 month	1	0.02	1,746,450	26,868	Illiquid	Illiquid
ILS-SEK_3 months	1	0.02	208,781	3,212	Illiquid	Illiquid
ILS-TRY_3 months	1	0.02	127,773	1,966	Illiquid	Illiquid
ILS-USD_<1 week	26	0.40	34,344,269	528,373	Illiquid	Illiquid
ILS-USD_1 week	17	0.26	40,178,313	618,128	Illiquid	Illiquid
ILS-USD_1 month	11	0.17	1,476,429	22,714	Illiquid	Illiquid
ILS-USD_3 months	73	1.12	87,938,273	1,352,897	Illiquid	Illiquid
ILS-USD_6 months	13	0.20	20,398,986	313,831	Illiquid	Illiquid
INR-USD_<1 week	86	1.32	130,465,689	2,007,164	Illiquid	Illiquid
INR-USD_1 week	220	3.38	68,734,899	1,057,460	Illiquid	Illiquid
INR-USD_1 month	12,285	189.00	993,508,501	15,284,746	Liquid	Liquid
INR-USD_3 months	9,788	150.58	744,719,798	11,457,228	Liquid	Liquid
INR-USD_6 months	28	0.43	66,530,171	1,023,541	Illiquid	Illiquid
INR-USD_1 year	116	1.78	26,735,335	411,313	Illiquid	Illiquid
JPY-MXN_<1 week	5	0.08	231,310	3,559	Illiquid	Illiquid
JPY-MXN_1 week	21	0.32	1,737,869	26,736	Illiquid	Illiquid
JPY-MXN_1 month	2	0.03	79,468	1,223	Illiquid	Illiquid
JPY-MYR_<1 week	2	0.03	743,079	11,432	Illiquid	Illiquid
JPY-MYR_1 month	1	0.02	371,540	5,716	Illiquid	Illiquid
JPY-NOK_<1 week	3	0.05	3,411,735	52,488	Illiquid	Illiquid
JPY-NOK_1 week	14	0.22	18,555,815	285,474	Illiquid	Illiquid
JPY-NOK_1 month	30	0.46	37,369,314	574,913	Illiquid	Illiquid
JPY-NOK_3 months	10	0.15	8,817,791	135,658	Illiquid	Illiquid
JPY-NOK_6 months	7	0.11	42,329,534	651,224	Illiquid	Illiquid
JPY-NOK_1 year	1	0.02	102,883	1,583	Illiquid	Illiquid
JPY-NOK_2 years	4	0.06	411,532	6,331	Illiquid	Illiquid
JPY-NZD_<1 week	1	0.02	311,167	4,787	Illiquid	Illiquid
JPY-NZD_1 week	12	0.18	9,960,452	153,238	Illiquid	Illiquid
JPY-NZD_1 month	4	0.06	11,889,686	182,918	Illiquid	Illiquid
JPY-NZD_3 months	21	0.32	37,346,832	574,567	Illiquid	Illiquid
JPY-NZD_6 months	3	0.05	4,496,435	69,176	Illiquid	Illiquid
JPY-PLN_3 months	1	0.02	709,538	10,916	Illiquid	Illiquid
JPY-RUB_6 months	1	0.02	1,917,419	29,499	Illiquid	Illiquid
JPY-SEK_<1 week	13	0.20	21,216,303	326,405	Illiquid	Illiquid
JPY-SEK_1 week	25	0.38	25,699,639	395,379	Illiquid	Illiquid
JPY-SEK_1 month	36	0.55	83,033,442	1,277,438	Illiquid	Illiquid
JPY-SEK_3 months	79	1.22	91,284,764	1,404,381	Illiquid	Illiquid
JPY-SEK_6 months	22	0.34	108,014,786	1,661,766	Illiquid	Illiquid
JPY-SEK_1 year	15	0.23	4,557,533	70,116	Illiquid	Illiquid
JPY-SEK_2 years	4	0.06	4,292,705	66,042	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-SGD <1 week	4	0.06	1,498,076	23,047	Illiquid	Illiquid
JPY-SGD 1 week	6	0.09	3,257,553	50,116	Illiquid	Illiquid
JPY-SGD 1 month	18	0.28	22,224,600	341,917	Illiquid	Illiquid
JPY-SGD 3 months	20	0.31	25,871,773	398,027	Illiquid	Illiquid
JPY-SGD 6 months	1	0.02	2,824,383	43,452	Illiquid	Illiquid
JPY-SGD 1 year	5	0.08	2,883,094	44,355	Illiquid	Illiquid
JPY-SGD 2 years	8	0.12	9,058,109	139,356	Illiquid	Illiquid
JPY-THB <1 week	9	0.14	817,080	12,570	Illiquid	Illiquid
JPY-THB 1 week	3	0.05	120,976	1,861	Illiquid	Illiquid
JPY-THB 1 month	3	0.05	39,895	614	Illiquid	Illiquid
JPY-THB 3 months	8	0.12	120,004	1,846	Illiquid	Illiquid
JPY-TRY <1 week	7	0.11	14,685,749	225,935	Illiquid	Illiquid
JPY-TRY 1 week	6	0.09	32,354	498	Illiquid	Illiquid
JPY-TWD <1 week	1	0.02	32,276	497	Illiquid	Illiquid
JPY-USD <1 week	336	5.17	1,634,233,219	25,142,050	Liquid	Liquid
JPY-USD 1 week	390	6.00	1,532,298,768	23,573,827	Liquid	Liquid
JPY-USD 1 month	881	13.55	4,252,935,250	65,429,773	Liquid	Liquid
JPY-USD 3 months	842	12.95	3,335,096,574	51,309,178	Liquid	Liquid
JPY-USD 6 months	122	1.88	269,896,365	4,152,252	Illiquid	Liquid
JPY-USD 1 year	114	1.75	1,882,599,306	28,963,066	Liquid	Liquid
JPY-USD 2 years	108	1.66	2,757,494,967	42,422,999	Liquid	Liquid
JPY-USD 3 years	18	0.28	76,077,515	1,170,423	Illiquid	Illiquid
JPY-ZAR <1 week	8	0.12	13,242,831	203,736	Illiquid	Illiquid
JPY-ZAR 1 week	19	0.29	486,620	7,486	Illiquid	Illiquid
JPY-ZAR 1 month	1	0.02	4,730	73	Illiquid	Illiquid
KRW-USD <1 week	74	1.14	332,347,072	5,113,032	Illiquid	Illiquid
KRW-USD 1 week	10	0.15	39,686,081	610,555	Illiquid	Illiquid
KRW-USD 1 month	227	3.49	781,102,941	12,016,968	Liquid	Illiquid
KRW-USD 3 months	130	2.00	276,786,969	4,258,261	Illiquid	Illiquid
KRW-USD 6 months	8	0.12	119,886,399	1,844,406	Illiquid	Illiquid
KRW-USD 1 year	12	0.18	44,883,629	690,517	Illiquid	Illiquid
KWD-SEK 1 week	1	0.02	437,969	6,738	Illiquid	Illiquid
KWD-SEK 3 months	1	0.02	553,902	8,522	Illiquid	Illiquid
KZT-SEK 3 months	1	0.02	794,984	12,231	Illiquid	Illiquid
KZT-USD <1 week	1	0.02	239,088	3,678	Illiquid	Illiquid
KZT-USD 1 month	1	0.02	950,605	14,625	Illiquid	Illiquid
KZT-USD 3 months	1	0.02	588,185	9,049	Illiquid	Illiquid
KZT-USD 1 year	2	0.03	14,504,654	223,149	Illiquid	Illiquid
LTL-NOK 1 week	1	0.02	28,959	446	Illiquid	Illiquid
LTL-PLN <1 week	2	0.03	141,570	2,178	Illiquid	Illiquid
LTL-SEK <1 week	1	0.02	1,158,359	17,821	Illiquid	Illiquid
LTL-SEK 1 week	1	0.02	216,020	3,323	Illiquid	Illiquid
LTL-SEK 1 month	1	0.02	1,239,444	19,068	Illiquid	Illiquid
LTL-SEK 6 months	2	0.03	173,754	2,673	Illiquid	Illiquid
MAD-USD <1 week	2	0.03	108,785	1,674	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
MXN-SEK__1 week	3	0.05	299,468	4,607	Illiquid	Illiquid
MXN-SEK__1 month	4	0.06	3,728,567	57,363	Illiquid	Illiquid
MXN-SEK__3 months	3	0.05	7,843,132	120,664	Illiquid	Illiquid
MXN-SEK__6 months	5	0.08	22,422,465	344,961	Illiquid	Illiquid
MXN-USD__<1 week	63	0.97	134,685,226	2,072,080	Illiquid	Illiquid
MXN-USD__1 week	144	2.22	828,443,256	12,745,281	Liquid	Illiquid
MXN-USD__1 month	110	1.69	261,643,090	4,025,278	Illiquid	Illiquid
MXN-USD__3 months	318	4.89	1,423,373,827	21,898,059	Liquid	Illiquid
MXN-USD__6 months	63	0.97	352,857,899	5,428,583	Illiquid	Illiquid
MXN-USD__1 year	13	0.20	72,995,223	1,123,003	Illiquid	Illiquid
MYR-USD__<1 week	27	0.42	45,176,910	695,029	Illiquid	Illiquid
MYR-USD__1 week	4	0.06	3,372,332	51,882	Illiquid	Illiquid
MYR-USD__1 month	76	1.17	104,451,281	1,606,943	Illiquid	Illiquid
MYR-USD__3 months	73	1.12	91,330,291	1,405,081	Illiquid	Illiquid
MYR-USD__6 months	14	0.22	27,256,781	419,335	Illiquid	Illiquid
MYR-USD__1 year	2	0.03	3,118,501	47,977	Illiquid	Illiquid
NGN-USD__<1 week	15	0.23	43,139,342	663,682	Illiquid	Illiquid
NGN-USD__1 week	4	0.06	169,937	2,614	Illiquid	Illiquid
NGN-USD__1 month	1	0.02	3,626,164	55,787	Illiquid	Illiquid
NGN-USD__6 months	4	0.06	16,782,724	258,196	Illiquid	Illiquid
NGN-USD__1 year	3	0.05	7,288,589	112,132	Illiquid	Illiquid
NOK-DKK__6 months	1	0.02	160,761	2,473	Illiquid	Illiquid
NOK-NZD__1 month	10	0.15	31,185,767	479,781	Illiquid	Illiquid
NOK-PLN__1 week	1	0.02	477,551	7,347	Illiquid	Illiquid
NOK-PLN__1 month	1	0.02	274,791	4,228	Illiquid	Illiquid
NOK-PLN__3 months	7	0.11	2,022,877	31,121	Illiquid	Illiquid
NOK-SEK__<1 week	132	2.03	200,401,054	3,083,093	Illiquid	Illiquid
NOK-SEK__1 week	206	3.17	301,085,146	4,632,079	Illiquid	Illiquid
NOK-SEK__1 month	221	3.40	800,843,632	12,320,671	Liquid	Liquid
NOK-SEK__3 months	153	2.35	714,604,922	10,993,922	Liquid	Liquid
NOK-SEK__6 months	70	1.08	137,061,615	2,108,640	Illiquid	Illiquid
NOK-SEK__1 year	53	0.82	76,940,790	1,183,704	Illiquid	Illiquid
NOK-SEK__2 years	31	0.48	9,610,126	147,848	Illiquid	Illiquid
NOK-SEK__4 years	3	0.05	845,409	13,006	Illiquid	Illiquid
NOK-SEK__5 years	1	0.02	12,150	187	Illiquid	Illiquid
NOK-SGD__1 week	5	0.08	31,952	492	Illiquid	Illiquid
NOK-SGD__1 month	12	0.18	5,699,606	87,686	Illiquid	Illiquid
NOK-SGD__3 months	10	0.15	149,515	2,300	Illiquid	Illiquid
NOK-SGD__6 months	2	0.03	1,199,714	18,457	Illiquid	Illiquid
NOK-SGD__1 year	2	0.03	1,322,682	20,349	Illiquid	Illiquid
NOK-SGD__2 years	2	0.03	1,313,122	20,202	Illiquid	Illiquid
NOK-THB__<1 week	1	0.02	22,370	344	Illiquid	Illiquid
NOK-THB__1 week	1	0.02	22,370	344	Illiquid	Illiquid
NOK-THB__3 months	1	0.02	2,572,516	39,577	Illiquid	Illiquid
NOK-THB__6 months	1	0.02	3,803	59	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
NOK-USD <1 week	50	0.77	67,727,334	1,041,959	Illiquid	Illiquid
NOK-USD 1 week	140	2.15	612,118,320	9,417,205	Illiquid	Illiquid
NOK-USD 1 month	211	3.25	1,603,155,684	24,663,934	Liquid	Liquid
NOK-USD 3 months	304	4.68	897,319,352	13,804,913	Liquid	Liquid
NOK-USD 6 months	70	1.08	327,841,227	5,043,711	Illiquid	Illiquid
NOK-USD 1 year	38	0.58	56,094,834	862,997	Illiquid	Illiquid
NOK-USD 2 years	32	0.49	49,085,136	755,156	Illiquid	Illiquid
NOK-USD 3 years	2	0.03	16,432,495	252,808	Illiquid	Illiquid
NOK-ZAR 1 week	1	0.02	48,127	740	Illiquid	Illiquid
NZD-DKK <1 week	1	0.02	309,945	4,768	Illiquid	Illiquid
NZD-DKK 1 week	1	0.02	309,945	4,768	Illiquid	Illiquid
NZD-SEK 1 week	3	0.05	16,921,121	260,325	Illiquid	Illiquid
NZD-SEK 1 month	5	0.08	1,381,581	21,255	Illiquid	Illiquid
NZD-SEK 3 months	10	0.15	7,456,502	114,715	Illiquid	Illiquid
NZD-SEK 6 months	3	0.05	522,214	8,034	Illiquid	Illiquid
NZD-SEK 1 year	1	0.02	274,761	4,227	Illiquid	Illiquid
NZD-SGD 3 months	2	0.03	315,287	4,851	Illiquid	Illiquid
NZD-THB <1 week	6	0.09	96,549	1,485	Illiquid	Illiquid
NZD-THB 1 week	5	0.08	48,057	739	Illiquid	Illiquid
NZD-USD <1 week	135	2.08	39,238,440	603,668	Illiquid	Illiquid
NZD-USD 1 week	252	3.88	163,416,176	2,514,095	Illiquid	Illiquid
NZD-USD 1 month	267	4.11	368,129,380	5,663,529	Illiquid	Illiquid
NZD-USD 3 months	434	6.68	316,103,176	4,863,126	Illiquid	Illiquid
NZD-USD 6 months	13	0.20	40,822,199	628,034	Illiquid	Illiquid
NZD-USD 1 year	3	0.05	303,611	4,671	Illiquid	Illiquid
NZD-USD 2 years	4	0.06	602,276	9,266	Illiquid	Illiquid
OMR-USD <1 week	1	0.02	414,405	6,375	Illiquid	Illiquid
OMR-USD 1 month	1	0.02	4,144,287	63,758	Illiquid	Illiquid
PEN-USD <1 week	3	0.05	16,476,715	253,488	Illiquid	Illiquid
PEN-USD 1 month	3	0.05	11,291,623	173,717	Illiquid	Illiquid
PEN-USD 3 months	5	0.08	34,060,655	524,010	Illiquid	Illiquid
PEN-USD 6 months	2	0.03	2,905,402	44,698	Illiquid	Illiquid
PHP-USD <1 week	47	0.72	52,458,387	807,052	Illiquid	Illiquid
PHP-USD 1 week	1	0.02	65,271	1,004	Illiquid	Illiquid
PHP-USD 1 month	19	0.29	36,707,931	564,737	Illiquid	Illiquid
PHP-USD 3 months	55	0.85	55,690,579	856,778	Illiquid	Illiquid
PHP-USD 6 months	7	0.11	6,735,272	103,620	Illiquid	Illiquid
PHP-USD 1 year	4	0.06	1,784,540	27,454	Illiquid	Illiquid
PLN-SEK <1 week	7	0.11	19,241,053	296,016	Illiquid	Illiquid
PLN-SEK 1 week	3	0.05	863,850	13,290	Illiquid	Illiquid
PLN-SEK 1 month	12	0.18	6,531,002	100,477	Illiquid	Illiquid
PLN-SEK 3 months	15	0.23	21,620,369	332,621	Illiquid	Illiquid
PLN-SEK 6 months	19	0.29	22,043,730	339,134	Illiquid	Illiquid
PLN-SEK 1 year	13	0.20	10,507,111	161,648	Illiquid	Illiquid
PLN-SEK 2 years	11	0.17	1,090,412	16,776	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
PLN-USD <1 week	68	1.05	263,441,667	4,052,949	Illiquid	Illiquid
PLN-USD 1 week	56	0.86	139,351,579	2,143,870	Illiquid	Illiquid
PLN-USD 1 month	97	1.49	152,053,122	2,339,279	Illiquid	Illiquid
PLN-USD 3 months	147	2.26	474,468,020	7,299,508	Illiquid	Illiquid
PLN-USD 6 months	20	0.31	11,147,617	171,502	Illiquid	Illiquid
PLN-USD 1 year	8	0.12	4,079,191	62,757	Illiquid	Illiquid
PLN-USD 2 years	4	0.06	2,103,175	32,357	Illiquid	Illiquid
RON-SEK <1 week	1	0.02	672,702	10,349	Illiquid	Illiquid
RON-SEK 1 week	3	0.05	67,513	1,039	Illiquid	Illiquid
RON-SEK 3 months	1	0.02	246,657	3,795	Illiquid	Illiquid
RON-USD <1 week	24	0.37	40,399,283	621,527	Illiquid	Illiquid
RON-USD 1 week	17	0.26	172,662,894	2,656,352	Illiquid	Illiquid
RON-USD 1 month	31	0.48	44,560,468	685,546	Illiquid	Illiquid
RON-USD 3 months	54	0.83	251,964,851	3,876,382	Illiquid	Illiquid
RON-USD 6 months	5	0.08	2,450,285	37,697	Illiquid	Illiquid
RON-USD 1 year	6	0.09	1,450,465	22,315	Illiquid	Illiquid
RON-USD 2 years	1	0.02	362,616	5,579	Illiquid	Illiquid
RUB-SEK 1 week	3	0.05	15,298,552	235,362	Illiquid	Illiquid
RUB-SEK 1 month	9	0.14	64,465,441	991,776	Illiquid	Illiquid
RUB-SEK 3 months	9	0.14	31,641,151	486,787	Illiquid	Illiquid
RUB-SEK 6 months	2	0.03	5,369,573	82,609	Illiquid	Illiquid
RUB-SEK 1 year	5	0.08	16,580,876	255,090	Illiquid	Illiquid
RUB-USD <1 week	85	1.31	35,807,081,263	550,878,173	Liquid	Illiquid
RUB-USD 1 week	46	0.71	537,340,688	8,266,780	Illiquid	Illiquid
RUB-USD 1 month	67	1.03	371,172,345	5,710,344	Illiquid	Illiquid
RUB-USD 3 months	152	2.34	1,193,420,011	18,360,308	Liquid	Illiquid
RUB-USD 6 months	36	0.55	257,934,720	3,968,226	Illiquid	Illiquid
RUB-USD 1 year	21	0.32	524,669,262	8,071,835	Illiquid	Illiquid
RUB-USD 2 years	14	0.22	197,874,917	3,044,229	Illiquid	Illiquid
RUB-USD 3 years	1	0.02	10,878,491	167,361	Illiquid	Illiquid
SAR-SEK 1 month	1	0.02	2,648	41	Illiquid	Illiquid
SAR-SEK 3 months	1	0.02	2,568	40	Illiquid	Illiquid
SAR-SGD 1 week	1	0.02	98,622	1,517	Illiquid	Illiquid
SAR-USD <1 week	9	0.14	129,204,077	1,987,755	Illiquid	Illiquid
SAR-USD 1 week	12	0.18	220,037,022	3,385,185	Illiquid	Illiquid
SAR-USD 1 month	6	0.09	13,045,087	200,694	Illiquid	Illiquid
SAR-USD 3 months	14	0.22	390,742,027	6,011,416	Illiquid	Illiquid
SAR-USD 2 years	2	0.03	54,150,710	833,088	Illiquid	Illiquid
SEK-DKK 1 month	6	0.09	1,845,350	28,390	Illiquid	Illiquid
SEK-DKK 3 months	1	0.02	863,458	13,284	Illiquid	Illiquid
SEK-DKK 6 months	1	0.02	125,929	1,937	Illiquid	Illiquid
SEK-SGD <1 week	2	0.03	177,410	2,729	Illiquid	Illiquid
SEK-SGD 1 week	12	0.18	3,500,584	53,855	Illiquid	Illiquid
SEK-SGD 1 month	9	0.14	14,406,748	221,642	Illiquid	Illiquid
SEK-SGD 3 months	19	0.29	195,080,635	3,001,241	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
SEK-SGD__6 months	7	0.11	9,703,532	149,285	Illiquid	Illiquid
SEK-SGD__1 year	6	0.09	202,572	3,116	Illiquid	Illiquid
SEK-THB__<1 week	8	0.12	114,199	1,757	Illiquid	Illiquid
SEK-THB__1 week	5	0.08	51,644	795	Illiquid	Illiquid
SEK-THB__1 month	6	0.09	3,596,620	55,333	Illiquid	Illiquid
SEK-THB__3 months	14	0.22	14,187,350	218,267	Illiquid	Illiquid
SEK-THB__6 months	3	0.05	794,124	12,217	Illiquid	Illiquid
SEK-THB__1 year	4	0.06	1,051,376	16,175	Illiquid	Illiquid
SEK-TRY__<1 week	4	0.06	887,505	13,654	Illiquid	Illiquid
SEK-TRY__1 month	1	0.02	1,554,617	23,917	Illiquid	Illiquid
SEK-TRY__3 months	5	0.08	9,043,786	139,135	Illiquid	Illiquid
SEK-TRY__6 months	7	0.11	23,294,900	358,383	Illiquid	Illiquid
SEK-TRY__1 year	2	0.03	6,627,007	101,954	Illiquid	Illiquid
SEK-USD__<1 week	274	4.22	952,212,778	14,649,427	Liquid	Liquid
SEK-USD__1 week	372	5.72	1,045,016,695	16,077,180	Liquid	Liquid
SEK-USD__1 month	645	9.92	2,462,965,788	37,891,781	Liquid	Liquid
SEK-USD__3 months	1,009	15.52	4,384,809,368	67,458,606	Liquid	Liquid
SEK-USD__6 months	390	6.00	2,280,929,412	35,091,222	Liquid	Liquid
SEK-USD__1 year	259	3.98	1,125,879,472	17,321,223	Liquid	Liquid
SEK-USD__2 years	85	1.31	89,284,933	1,373,614	Illiquid	Illiquid
SEK-USD__3 years	13	0.20	6,347,248	97,650	Illiquid	Illiquid
SEK-USD__4 years	1	0.02	2,154,077	33,140	Illiquid	Illiquid
SEK-USD__5 years	3	0.05	6,462,230	99,419	Illiquid	Illiquid
SEK-USD__6 years	2	0.03	4,308,154	66,279	Illiquid	Illiquid
SEK-USD__7 years	1	0.02	2,154,077	33,140	Illiquid	Illiquid
SEK-ZAR__<1 week	1	0.02	353,206	5,434	Illiquid	Illiquid
SEK-ZAR__1 month	6	0.09	10,093,263	155,281	Illiquid	Illiquid
SEK-ZAR__3 months	19	0.29	59,616,006	917,169	Illiquid	Illiquid
SEK-ZAR__6 months	3	0.05	18,627,435	286,576	Illiquid	Illiquid
SEK-ZAR__1 year	1	0.02	633,027	9,739	Illiquid	Illiquid
SGD-THB__<1 week	9	0.14	664,777	10,227	Illiquid	Illiquid
SGD-THB__1 week	4	0.06	150,998	2,323	Illiquid	Illiquid
SGD-THB__1 month	5	0.08	1,685,289	25,928	Illiquid	Illiquid
SGD-THB__3 months	1	0.02	279,342	4,298	Illiquid	Illiquid
SGD-THB__1 year	2	0.03	2,478,945	38,138	Illiquid	Illiquid
SGD-THB__2 years	1	0.02	1,493,247	22,973	Illiquid	Illiquid
SGD-TRY__1 year	2	0.03	975,177	15,003	Illiquid	Illiquid
SGD-TRY__2 years	2	0.03	936,579	14,409	Illiquid	Illiquid
SGD-USD__<1 week	126	1.94	369,640,193	5,686,772	Illiquid	Illiquid
SGD-USD__1 week	88	1.35	133,229,727	2,049,688	Illiquid	Illiquid
SGD-USD__1 month	188	2.89	258,677,072	3,979,647	Illiquid	Illiquid
SGD-USD__3 months	391	6.02	890,533,159	13,700,510	Liquid	Illiquid
SGD-USD__6 months	37	0.57	121,974,525	1,876,531	Illiquid	Illiquid
SGD-USD__1 year	17	0.26	97,158,890	1,494,752	Illiquid	Illiquid
SGD-USD__2 years	17	0.26	148,525,866	2,285,013	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
SGD-ZAR __<1 week	2	0.03	5,135	79	Illiquid	Illiquid
SGD-ZAR __1 year	2	0.03	663,747	10,211	Illiquid	Illiquid
SGD-ZAR __2 years	2	0.03	641,339	9,867	Illiquid	Illiquid
THB-USD __<1 week	368	5.66	163,650,263	2,517,696	Illiquid	Illiquid
THB-USD __1 week	224	3.45	143,814,505	2,212,531	Illiquid	Illiquid
THB-USD __1 month	99	1.52	144,935,362	2,229,775	Illiquid	Illiquid
THB-USD __3 months	221	3.40	311,025,679	4,785,010	Illiquid	Illiquid
THB-USD __6 months	32	0.49	86,701,580	1,333,870	Illiquid	Illiquid
THB-USD __1 year	1	0.02	3,989,898	61,383	Illiquid	Illiquid
TRY-USD __<1 week	2,428	37.35	1,546,755,109	23,796,232	Liquid	Illiquid
TRY-USD __1 week	235	3.62	643,050,830	9,893,090	Illiquid	Illiquid
TRY-USD __1 month	803	12.35	583,987,400	8,984,422	Illiquid	Illiquid
TRY-USD __3 months	640	9.85	465,904,639	7,167,764	Illiquid	Illiquid
TRY-USD __6 months	53	0.82	445,953,571	6,860,824	Illiquid	Illiquid
TRY-USD __1 year	28	0.43	113,180,090	1,741,232	Illiquid	Illiquid
TRY-USD __2 years	1	0.02	9,065,409	139,468	Illiquid	Illiquid
TWD-USD __<1 week	62	0.95	290,173,002	4,464,200	Illiquid	Illiquid
TWD-USD __1 month	93	1.43	374,501,365	5,761,559	Illiquid	Illiquid
TWD-USD __3 months	106	1.63	217,260,547	3,342,470	Illiquid	Illiquid
TWD-USD __6 months	20	0.31	61,905,402	952,391	Illiquid	Illiquid
TWD-USD __1 year	5	0.08	929,688	14,303	Illiquid	Illiquid
USD-AMD __1 month	1	0.02	366,344	5,636	Illiquid	Illiquid
USD-AOA __1 month	1	0.02	2,175,698	33,472	Illiquid	Illiquid
USD-BGN __1 week	1	0.02	12,906,538	198,562	Illiquid	Illiquid
USD-BGN __1 month	16	0.25	36,676,501	564,254	Illiquid	Illiquid
USD-BGN __3 months	10	0.15	2,763,001	42,508	Illiquid	Illiquid
USD-CAD __3 months	1	0.02	725,233	11,157	Illiquid	Illiquid
USD-CHF __1 month	11	0.17	1,821,588	28,024	Illiquid	Illiquid
USD-CHF __3 months	6	0.09	880,848	13,552	Illiquid	Illiquid
USD-CHF __6 months	2	0.03	2,495,370	38,390	Illiquid	Illiquid
USD-CRC __<1 week	7	0.11	24,734,323	380,528	Illiquid	Illiquid
USD-CRC __1 month	5	0.08	14,920,314	229,543	Illiquid	Illiquid
USD-CRC __3 months	1	0.02	11,287,141	173,648	Illiquid	Illiquid
USD-DKK __<1 week	2	0.03	69,246	1,065	Illiquid	Illiquid
USD-DKK __1 month	6	0.09	753,710	11,596	Illiquid	Illiquid
USD-DKK __3 months	6	0.09	1,190,605	18,317	Illiquid	Illiquid
USD-DKK __6 months	7	0.11	3,407,175	52,418	Illiquid	Illiquid
USD-DOP __<1 week	5	0.08	2,650,249	40,773	Illiquid	Illiquid
USD-DOP __1 month	1	0.02	156,450	2,407	Illiquid	Illiquid
USD-DOP __3 months	3	0.05	2,096,082	32,247	Illiquid	Illiquid
USD-EGP __3 months	4	0.06	3,303,177	50,818	Illiquid	Illiquid
USD-GTQ __6 months	1	0.02	2,719,623	41,840	Illiquid	Illiquid
USD-HRK __<1 week	2	0.03	1,183,580	18,209	Illiquid	Illiquid
USD-HRK __1 month	8	0.12	6,080,937	93,553	Illiquid	Illiquid
USD-HRK __3 months	13	0.20	1,364,342	20,990	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-HRK_6 months	2	0.03	1,764,121	27,140	Illiquid	Illiquid
USD-HRK_1 year	1	0.02	15,955,120	245,463	Illiquid	Illiquid
USD-JOD_<1 week	1	0.02	348,000	5,354	Illiquid	Illiquid
USD-JPY_<1 week	1	0.02	72,523	1,116	Illiquid	Illiquid
USD-JPY_1 week	1	0.02	3,626,164	55,787	Illiquid	Illiquid
USD-JPY_1 month	14	0.22	8,675,573	133,470	Illiquid	Illiquid
USD-JPY_3 months	8	0.12	5,111,651	78,641	Illiquid	Illiquid
USD-JPY_6 months	1	0.02	72,523	1,116	Illiquid	Illiquid
USD-KWD_<1 week	2	0.03	1,902,630	29,271	Illiquid	Illiquid
USD-LTL_3 months	9	0.14	342,310	5,266	Illiquid	Illiquid
USD-LTL_6 months	4	0.06	10,153	156	Illiquid	Illiquid
USD-NOK_<1 week	5	0.08	534,794	8,228	Illiquid	Illiquid
USD-NOK_1 month	31	0.48	6,597,766	101,504	Illiquid	Illiquid
USD-NOK_3 months	36	0.55	42,341,351	651,405	Illiquid	Illiquid
USD-NOK_6 months	16	0.25	33,686,776	518,258	Illiquid	Illiquid
USD-NZD_<1 week	1	0.02	622,334	9,574	Illiquid	Illiquid
USD-NZD_1 week	1	0.02	622,334	9,574	Illiquid	Illiquid
USD-NZD_1 month	1	0.02	1,244,668	19,149	Illiquid	Illiquid
USD-NZD_3 months	5	0.08	3,920,703	60,319	Illiquid	Illiquid
USD-NZD_6 months	2	0.03	1,431,368	22,021	Illiquid	Illiquid
USD-PLN_<1 week	4	0.06	3,215	49	Illiquid	Illiquid
USD-PLN_1 week	1	0.02	510	8	Illiquid	Illiquid
USD-PLN_1 month	14	0.22	97,009	1,492	Illiquid	Illiquid
USD-PLN_3 months	29	0.45	60,347	928	Illiquid	Illiquid
USD-PLN_6 months	4	0.06	85,916	1,322	Illiquid	Illiquid
USD-QAR_<1 week	2	0.03	3,720,861	57,244	Illiquid	Illiquid
USD-QAR_1 week	3	0.05	1,484,575	22,840	Illiquid	Illiquid
USD-SEK_<1 week	1	0.02	288,936	4,445	Illiquid	Illiquid
USD-SEK_1 month	23	0.35	11,936,535	183,639	Illiquid	Illiquid
USD-SEK_3 months	31	0.48	23,094,670	355,303	Illiquid	Illiquid
USD-SEK_6 months	21	0.32	8,197,597	126,117	Illiquid	Illiquid
USD-SEK_1 year	2	0.03	2,079,242	31,988	Illiquid	Illiquid
USD-SEK_2 years	1	0.02	108,785	1,674	Illiquid	Illiquid
USD-TND_1 week	6	0.09	18,347,118	282,263	Illiquid	Illiquid
USD-TND_1 month	2	0.03	522,736	8,042	Illiquid	Illiquid
USD-TND_3 months	6	0.09	18,720,056	288,001	Illiquid	Illiquid
USD-TND_6 months	4	0.06	1,945,675	29,933	Illiquid	Illiquid
USD-UAH_<1 week	1	0.02	7,667	118	Illiquid	Illiquid
USD-UAH_1 week	1	0.02	725,233	11,157	Illiquid	Illiquid
USD-UAH_1 month	5	0.08	16,317,342	251,036	Illiquid	Illiquid
USD-UAH_3 months	7	0.11	16,940,690	260,626	Illiquid	Illiquid
USD-UAH_6 months	4	0.06	14,504,654	223,149	Illiquid	Illiquid
USD-UYU_1 year	4	0.06	15,292,111	235,263	Illiquid	Illiquid
USD-VND_3 months	6	0.09	11,237,702	172,888	Illiquid	Illiquid
USD-VND_6 months	2	0.03	2,049,607	31,532	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					10,000,000	
Num of trades per day					1.00	
DELIVERABLE FORWARDS (DF)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-XAU <1 week	18	0.28	975,012,186	15,000,187	Illiquid	Illiquid
USD-XAU 1 month	7	0.11	19,793,720	304,519	Illiquid	Illiquid
USD-XAU 3 months	5	0.08	24,649,656	379,225	Illiquid	Illiquid
USD-XAU 6 months	2	0.03	11,376,764	175,027	Illiquid	Illiquid
USD-XAU 1 year	1	0.02	34,685,257	533,619	Illiquid	Illiquid
USD-XAU 2 years	2	0.03	20,811,154	320,172	Illiquid	Illiquid
USD-XAU 3 years	1	0.02	18,498,804	284,597	Illiquid	Illiquid
USD-ZAR <1 week	309	4.75	348,680,770	5,364,320	Illiquid	Illiquid
USD-ZAR 1 week	105	1.62	188,058,419	2,893,206	Illiquid	Illiquid
USD-ZAR 1 month	134	2.06	492,602,483	7,578,500	Illiquid	Illiquid
USD-ZAR 3 months	325	5.00	923,437,423	14,206,730	Liquid	Illiquid
USD-ZAR 6 months	50	0.77	95,662,468	1,471,730	Illiquid	Illiquid
USD-ZAR 1 year	2	0.03	17,145,898	263,783	Illiquid	Illiquid
ZAR-HUF 1 month	2	0.03	316,270	4,866	Illiquid	Illiquid

Table 4: Deliverable Forwards (DF) - liquidity assessment

FX Options

11. The class of FX options was divided into more granular sub-classes on the basis of the two following criteria:
 - i. the underlying currency pair;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. The same approach used for forwards was applied to define the tenor buckets.

12. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the “Liquidity Flag” is based, are indicated. However, as stated above the classification of a sub-class as liquid was confirmed only if concentration of liquidity across tenors was present. In other words, if for a currency pair only one tenor was liquid it was deemed to be illiquid. The final classification of the sub-class as liquid is provided in the field “Final Liquidity Flag”. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered¹¹.

¹¹ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-BRL__6 months	11	0.17	46,312,830	712,505	Illiquid	Illiquid
AUD-BRL__1 year	1	0.02	334,757	5,150	Illiquid	Illiquid
AUD-CAD__<1 week	37	0.57	1,265,248,982	19,465,369	Illiquid	Illiquid
AUD-CAD__1 week	180	2.77	355,751,682	5,473,103	Illiquid	Illiquid
AUD-CAD__1 month	1,059	16.29	2,133,866,396	32,828,714	Illiquid	Illiquid
AUD-CAD__3 months	539	8.29	1,736,672,360	26,718,036	Illiquid	Illiquid
AUD-CAD__6 months	156	2.40	2,367,247,164	36,419,187	Illiquid	Illiquid
AUD-CAD__1 year	62	0.95	631,630,099	9,717,386	Illiquid	Illiquid
AUD-CAD__2 years	13	0.20	182,639,360	2,809,836	Illiquid	Illiquid
AUD-CHF__<1 week	2	0.03	49,611,594	763,255	Illiquid	Illiquid
AUD-CHF__1 week	40	0.62	54,203,676	833,903	Illiquid	Illiquid
AUD-CHF__1 month	98	1.51	1,037,405,605	15,960,086	Illiquid	Illiquid
AUD-CHF__3 months	87	1.34	1,020,020,822	15,692,628	Illiquid	Illiquid
AUD-CHF__6 months	23	0.35	155,416,098	2,391,017	Illiquid	Illiquid
AUD-CHF__1 year	36	0.55	177,801,325	2,735,405	Illiquid	Illiquid
AUD-CHF__2 years	8	0.12	142,411,708	2,190,949	Illiquid	Illiquid
AUD-CNY__1 month	78	1.20	41,597,669	639,964	Illiquid	Illiquid
AUD-CNY__3 months	36	0.55	14,213,652	218,672	Illiquid	Illiquid
AUD-CNY__2 years	2	0.03	19,533,573	300,517	Illiquid	Illiquid
AUD-DKK__3 months	4	0.06	3,213,667	49,441	Illiquid	Illiquid
AUD-DKK__6 months	1	0.02	905,618	13,933	Illiquid	Illiquid
AUD-HKD__1 week	137	2.11	6,170,944	94,938	Illiquid	Illiquid
AUD-HKD__1 month	2,561	39.40	127,586,285	1,962,866	Illiquid	Illiquid
AUD-HKD__3 months	917	14.11	47,052,652	723,887	Illiquid	Illiquid
AUD-HKD__6 months	79	1.22	16,147,330	248,420	Illiquid	Illiquid
AUD-HKD__1 year	7	0.11	20,141,231	309,865	Illiquid	Illiquid
AUD-INR__3 months	2	0.03	32,670,606	502,625	Illiquid	Illiquid
AUD-INR__6 months	1	0.02	16,335,303	251,312	Illiquid	Illiquid
AUD-JPY__<1 week	94	1.45	2,061,059,972	31,708,615	Illiquid	Illiquid
AUD-JPY__1 week	170	2.62	3,340,739,769	51,395,996	Illiquid	Illiquid
AUD-JPY__1 month	1,086	16.71	17,297,310,479	266,112,469	Illiquid	Illiquid
AUD-JPY__3 months	1,001	15.40	18,477,622,766	284,271,119	Illiquid	Illiquid
AUD-JPY__6 months	540	8.31	8,553,455,418	131,591,622	Illiquid	Illiquid
AUD-JPY__1 year	377	5.80	8,017,593,124	123,347,587	Illiquid	Illiquid
AUD-JPY__2 years	268	4.12	5,015,962,928	77,168,660	Illiquid	Illiquid
AUD-JPY__3 years	123	1.89	2,001,200,673	30,787,703	Illiquid	Illiquid
AUD-JPY__4 years	43	0.66	749,777,334	11,535,036	Illiquid	Illiquid
AUD-JPY__5 years	78	1.20	1,769,507,007	27,223,185	Illiquid	Illiquid
AUD-JPY__6 years	44	0.68	424,076,470	6,524,253	Illiquid	Illiquid
AUD-JPY__7 years	27	0.42	453,546,447	6,977,638	Illiquid	Illiquid
AUD-JPY__8 years	35	0.54	513,156,270	7,894,712	Illiquid	Illiquid
AUD-JPY__16 years	23	0.35	540,611,712	8,317,103	Illiquid	Illiquid
AUD-JPY__10 years	25	0.38	659,170,308	10,141,082	Illiquid	Illiquid
AUD-JPY__11 years	36	0.55	953,245,478	14,665,315	Illiquid	Illiquid
AUD-JPY__12 years	2	0.03	47,595,502	732,238	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-JPY__13 years	1	0.02	33,475,695	515,011	Illiquid	Illiquid
AUD-JPY__14 years	2	0.03	43,500,172	669,233	Illiquid	Illiquid
AUD-JPY__15 years	11	0.17	274,603,792	4,224,674	Illiquid	Illiquid
AUD-JPY__18 years	8	0.12	180,233,558	2,772,824	Illiquid	Illiquid
AUD-JPY__19 years	10	0.15	375,083,106	5,770,509	Illiquid	Illiquid
AUD-JPY__20 years	4	0.06	67,776,904	1,042,722	Illiquid	Illiquid
AUD-JPY__21 years	11	0.17	169,422,992	2,606,508	Illiquid	Illiquid
AUD-JPY__27 years	1	0.02	49,544,029	762,216	Illiquid	Illiquid
AUD-JPY__28 years	1	0.02	33,475,695	515,011	Illiquid	Illiquid
AUD-JPY__9 years	22	0.34	502,202,617	7,726,194	Illiquid	Illiquid
AUD-MXN__3 months	7	0.11	94,294,932	1,450,691	Illiquid	Illiquid
AUD-MXN__6 months	16	0.25	239,416,879	3,683,337	Illiquid	Illiquid
AUD-MXN__1 year	10	0.15	137,836,196	2,120,557	Illiquid	Illiquid
AUD-NOK__1 month	2	0.03	1,354,924	20,845	Illiquid	Illiquid
AUD-NOK__3 months	10	0.15	16,413,600	252,517	Illiquid	Illiquid
AUD-NOK__1 year	1	0.02	27,332,042	420,493	Illiquid	Illiquid
AUD-NZD__<1 week	65	1.00	986,408,321	15,175,513	Illiquid	Illiquid
AUD-NZD__1 week	416	6.40	1,335,566,432	20,547,176	Illiquid	Illiquid
AUD-NZD__1 month	3,306	50.86	10,548,712,163	162,287,879	Illiquid	Illiquid
AUD-NZD__3 months	2,075	31.92	16,527,802,863	254,273,890	Illiquid	Illiquid
AUD-NZD__6 months	214	3.29	3,134,806,363	48,227,790	Illiquid	Illiquid
AUD-NZD__1 year	152	2.34	1,474,673,473	22,687,284	Illiquid	Illiquid
AUD-NZD__2 years	38	0.58	257,660,438	3,964,007	Illiquid	Illiquid
AUD-NZD__3 years	2	0.03	2,106,774	32,412	Illiquid	Illiquid
AUD-SEK__1 month	2	0.03	13,390,278	206,004	Illiquid	Illiquid
AUD-SEK__3 months	13	0.20	91,638,811	1,409,828	Illiquid	Illiquid
AUD-SEK__6 months	5	0.08	36,597,014	563,031	Illiquid	Illiquid
AUD-SEK__1 year	29	0.45	112,850,911	1,736,168	Illiquid	Illiquid
AUD-SGD__<1 week	4	0.06	44,248,577	680,747	Illiquid	Illiquid
AUD-SGD__1 week	4	0.06	20,050,262	308,466	Illiquid	Illiquid
AUD-SGD__1 month	221	3.40	158,437,831	2,437,505	Illiquid	Illiquid
AUD-SGD__3 months	119	1.83	633,362,552	9,744,039	Illiquid	Illiquid
AUD-SGD__6 months	5	0.08	21,232,902	326,660	Illiquid	Illiquid
AUD-SGD__1 year	15	0.23	175,290,636	2,696,779	Illiquid	Illiquid
AUD-SGD__2 years	3	0.05	13,459,897	207,075	Illiquid	Illiquid
AUD-USD__<1 week	712	10.95	11,192,265,605	172,188,702	Illiquid	Illiquid
AUD-USD__1 week	1,623	24.97	19,506,899,592	300,106,148	Illiquid	Illiquid
AUD-USD__1 month	9,127	140.42	61,347,579,949	943,808,922	Liquid	Liquid
AUD-USD__3 months	6,032	92.80	72,663,847,254	1,117,905,342	Liquid	Liquid
AUD-USD__6 months	3,275	50.38	32,417,533,208	498,731,280	Illiquid	Illiquid
AUD-USD__1 year	2,946	45.32	25,912,379,435	398,651,991	Illiquid	Illiquid
AUD-USD__2 years	576	8.86	10,121,665,348	155,717,928	Illiquid	Illiquid
AUD-USD__3 years	52	0.80	929,642,702	14,302,195	Illiquid	Illiquid
AUD-USD__4 years	21	0.32	287,910,673	4,429,395	Illiquid	Illiquid
AUD-USD__5 years	8	0.12	89,357,358	1,374,729	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
AUD-USD__6 years	5	0.08	125,460,849	1,930,167	Illiquid	Illiquid
AUD-USD__8 years	2	0.03	41,842,399	643,729	Illiquid	Illiquid
AUD-ZAR__1 month	226	3.48	51,058,976	785,523	Illiquid	Illiquid
AUD-ZAR__3 months	41	0.63	5,341,186	82,172	Illiquid	Illiquid
AUD-ZAR__6 months	5	0.08	16,599,787	255,381	Illiquid	Illiquid
AUD-ZAR__1 year	1	0.02	93,380	1,437	Illiquid	Illiquid
AUD-ZAR__2 years	1	0.02	26,604	409	Illiquid	Illiquid
BRL-ILS__1 year	2	0.03	4,272,747	65,735	Illiquid	Illiquid
BRL-ILS__2 years	4	0.06	9,963,805	153,289	Illiquid	Illiquid
CAD-BRL__3 months	1	0.02	26,383,316	405,897	Illiquid	Illiquid
CAD-BRL__6 months	2	0.03	33,576,792	516,566	Illiquid	Illiquid
CAD-CHF__1 week	2	0.03	8,574,578	131,917	Illiquid	Illiquid
CAD-CHF__1 month	51	0.78	68,839,697	1,059,072	Illiquid	Illiquid
CAD-CHF__3 months	13	0.20	139,479,237	2,145,834	Illiquid	Illiquid
CAD-CHF__6 months	3	0.05	7,369,849	113,382	Illiquid	Illiquid
CAD-CNY__1 month	20	0.31	5,770,203	88,772	Illiquid	Illiquid
CAD-CNY__3 months	1	0.02	84,311	1,297	Illiquid	Illiquid
CAD-CZK__6 months	1	0.02	793,940	12,214	Illiquid	Illiquid
CAD-CZK__1 year	2	0.03	1,014,840	15,613	Illiquid	Illiquid
CAD-DKK__1 month	3	0.05	7,697,299	118,420	Illiquid	Illiquid
CAD-DKK__3 months	7	0.11	19,038,680	292,903	Illiquid	Illiquid
CAD-DKK__6 months	2	0.03	4,893,484	75,284	Illiquid	Illiquid
CAD-DKK__1 year	10	0.15	43,631,897	671,260	Illiquid	Illiquid
CAD-HKD__1 week	23	0.35	1,497,098	23,032	Illiquid	Illiquid
CAD-HKD__1 month	815	12.54	45,313,991	697,138	Illiquid	Illiquid
CAD-HKD__3 months	306	4.71	17,640,183	271,387	Illiquid	Illiquid
CAD-HKD__6 months	54	0.83	998,465	15,361	Illiquid	Illiquid
CAD-HKD__1 year	1	0.02	753,152	11,587	Illiquid	Illiquid
CAD-INR__1 year	2	0.03	10,897,047	167,647	Illiquid	Illiquid
CAD-JPY__<1 week	8	0.12	93,089,635	1,432,148	Illiquid	Illiquid
CAD-JPY__1 week	34	0.52	115,805,926	1,781,630	Illiquid	Illiquid
CAD-JPY__1 month	276	4.25	1,414,733,200	21,765,126	Illiquid	Illiquid
CAD-JPY__3 months	186	2.86	3,560,818,902	54,781,829	Illiquid	Illiquid
CAD-JPY__6 months	64	0.98	856,198,230	13,172,280	Illiquid	Illiquid
CAD-JPY__1 year	33	0.51	626,311,492	9,635,561	Illiquid	Illiquid
CAD-JPY__2 years	59	0.91	1,204,840,470	18,536,007	Illiquid	Illiquid
CAD-MXN__<1 week	2	0.03	791,499	12,177	Illiquid	Illiquid
CAD-MXN__1 week	4	0.06	1,451,082	22,324	Illiquid	Illiquid
CAD-MXN__1 month	21	0.32	316,526,091	4,869,632	Illiquid	Illiquid
CAD-MXN__3 months	15	0.23	119,818,469	1,843,361	Illiquid	Illiquid
CAD-MXN__6 months	3	0.05	13,854,886	213,152	Illiquid	Illiquid
CAD-NOK__1 month	4	0.06	10,744,474	165,300	Illiquid	Illiquid
CAD-NOK__3 months	9	0.14	44,642,714	686,811	Illiquid	Illiquid
CAD-NOK__6 months	5	0.08	362,045	5,570	Illiquid	Illiquid
CAD-NOK__1 year	6	0.09	10,318,095	158,740	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
CAD-NOK__2 years	1	0.02	121,499	1,869	Illiquid	Illiquid
CAD-NZD__1 week	53	0.82	76,082,000	1,170,492	Illiquid	Illiquid
CAD-NZD__1 month	632	9.72	225,592,550	3,470,655	Illiquid	Illiquid
CAD-NZD__3 months	201	3.09	540,232,607	8,311,271	Illiquid	Illiquid
CAD-NZD__6 months	27	0.42	62,034,723	954,380	Illiquid	Illiquid
CAD-NZD__1 year	34	0.52	236,629,860	3,640,459	Illiquid	Illiquid
CAD-NZD__2 years	69	1.06	1,013,545,454	15,593,007	Illiquid	Illiquid
CAD-SEK__1 week	2	0.03	14,269,346	219,528	Illiquid	Illiquid
CAD-SEK__1 month	2	0.03	14,280,488	219,700	Illiquid	Illiquid
CAD-SEK__3 months	15	0.23	64,224,417	988,068	Illiquid	Illiquid
CAD-SEK__6 months	10	0.15	7,448,791	114,597	Illiquid	Illiquid
CAD-SEK__1 year	11	0.17	629,935	9,691	Illiquid	Illiquid
CAD-SGD__1 month	23	0.35	15,790,722	242,934	Illiquid	Illiquid
CAD-SGD__3 months	3	0.05	13,994,569	215,301	Illiquid	Illiquid
CAD-SGD__6 months	2	0.03	243,973	3,753	Illiquid	Illiquid
CAD-SGD__1 year	3	0.05	19,525,714	300,396	Illiquid	Illiquid
CAD-SGD__2 years	3	0.05	9,781,315	150,482	Illiquid	Illiquid
CAD-ZAR__1 week	1	0.02	10,030,350	154,313	Illiquid	Illiquid
CAD-ZAR__1 month	32	0.49	3,027,944	46,584	Illiquid	Illiquid
CAD-ZAR__3 months	17	0.26	2,044,291	31,451	Illiquid	Illiquid
CHF-BRL__6 months	8	0.12	11,541,087	177,555	Illiquid	Illiquid
CHF-BRL__1 year	2	0.03	2,885,272	44,389	Illiquid	Illiquid
CHF-CNY__1 week	2	0.03	630,454	9,699	Illiquid	Illiquid
CHF-CNY__1 month	2	0.03	630,454	9,699	Illiquid	Illiquid
CHF-CNY__3 months	2	0.03	630,454	9,699	Illiquid	Illiquid
CHF-DKK__1 month	2	0.03	1,931,063	29,709	Illiquid	Illiquid
CHF-DKK__3 months	5	0.08	5,032,095	77,417	Illiquid	Illiquid
CHF-DKK__6 months	4	0.06	2,748,223	42,280	Illiquid	Illiquid
CHF-DKK__1 year	2	0.03	2,449,723	37,688	Illiquid	Illiquid
CHF-HKD__1 week	1	0.02	19,979	307	Illiquid	Illiquid
CHF-HKD__1 month	51	0.78	6,305,524	97,008	Illiquid	Illiquid
CHF-HKD__3 months	9	0.14	201,232	3,096	Illiquid	Illiquid
CHF-HUF__1 month	14	0.22	35,538,791	546,751	Illiquid	Illiquid
CHF-HUF__3 months	3	0.05	4,511,829	69,413	Illiquid	Illiquid
CHF-JPY__<1 week	5	0.08	157,538,031	2,423,662	Illiquid	Illiquid
CHF-JPY__1 week	26	0.40	246,281,136	3,788,941	Illiquid	Illiquid
CHF-JPY__1 month	128	1.97	1,460,491,162	22,469,095	Illiquid	Illiquid
CHF-JPY__3 months	154	2.37	2,660,856,859	40,936,259	Illiquid	Illiquid
CHF-JPY__6 months	63	0.97	669,556,090	10,300,863	Illiquid	Illiquid
CHF-JPY__1 year	51	0.78	442,871,821	6,813,413	Illiquid	Illiquid
CHF-JPY__2 years	19	0.29	55,036,853	846,721	Illiquid	Illiquid
CHF-NOK__<1 week	4	0.06	20,690,946	318,322	Illiquid	Illiquid
CHF-NOK__1 week	1	0.02	7,472,178	114,957	Illiquid	Illiquid
CHF-NOK__1 month	6	0.09	25,772,032	396,493	Illiquid	Illiquid
CHF-NOK__3 months	9	0.14	53,876,896	828,875	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
CHF-NOK_6 months	4	0.06	53,456,641	822,410	Illiquid	Illiquid
CHF-NOK_1 year	3	0.05	24,751,466	380,792	Illiquid	Illiquid
CHF-NOK_2 years	5	0.08	69,211,577	1,064,793	Illiquid	Illiquid
CHF-NZD_1 week	8	0.12	74,278,466	1,142,746	Illiquid	Illiquid
CHF-NZD_1 month	64	0.98	41,441,363	637,559	Illiquid	Illiquid
CHF-NZD_3 months	57	0.88	41,743,952	642,215	Illiquid	Illiquid
CHF-NZD_6 months	23	0.35	73,377,188	1,128,880	Illiquid	Illiquid
CHF-NZD_1 year	23	0.35	28,814,053	443,293	Illiquid	Illiquid
CHF-NZD_2 years	5	0.08	68,456,713	1,053,180	Illiquid	Illiquid
CHF-PLN_3 months	2	0.03	649,469	9,992	Illiquid	Illiquid
CHF-PLN_2 years	2	0.03	9,904,533	152,377	Illiquid	Illiquid
CHF-RUB_1 month	11	0.17	10,719,112	164,909	Illiquid	Illiquid
CHF-RUB_6 months	2	0.03	3,609,463	55,530	Illiquid	Illiquid
CHF-SEK_3 months	3	0.05	16,963,463	260,976	Illiquid	Illiquid
CHF-SEK_1 year	6	0.09	88,752,938	1,365,430	Illiquid	Illiquid
CHF-SEK_2 years	2	0.03	44,864,462	690,222	Illiquid	Illiquid
CHF-SGD_1 month	5	0.08	1,540,289	23,697	Illiquid	Illiquid
CHF-SGD_3 months	1	0.02	820,333	12,621	Illiquid	Illiquid
CHF-SGD_1 year	4	0.06	24,609,978	378,615	Illiquid	Illiquid
CHF-TRY_1 month	2	0.03	3,869,854	59,536	Illiquid	Illiquid
CHF-TRY_3 months	4	0.06	18,278,437	281,207	Illiquid	Illiquid
CHF-TRY_6 months	4	0.06	17,858,588	274,748	Illiquid	Illiquid
CHF-TRY_1 year	2	0.03	5,524,433	84,991	Illiquid	Illiquid
CHF-TRY_2 years	3	0.05	30,824,920	474,230	Illiquid	Illiquid
CHF-ZAR_1 week	1	0.02	3,223,429	49,591	Illiquid	Illiquid
CHF-ZAR_2 years	6	0.09	121,478,600	1,868,902	Illiquid	Illiquid
CLP-COP_1 month	4	0.06	11,047,101	169,955	Illiquid	Illiquid
CNY-HKD_1 month	1	0.02	92,443	1,422	Illiquid	Illiquid
CNY-NZD_1 month	21	0.32	11,697,352	179,959	Illiquid	Illiquid
CNY-NZD_3 months	2	0.03	117,215	1,803	Illiquid	Illiquid
CNY-NZD_6 months	11	0.17	9,601,503	147,715	Illiquid	Illiquid
CNY-PLN_6 months	14	0.22	3,285,072	50,540	Illiquid	Illiquid
CNY-TWD_2 years	2	0.03	7,017,838	107,967	Illiquid	Illiquid
CNY-ZAR_1 month	10	0.15	1,229,106	18,909	Illiquid	Illiquid
CNY-ZAR_3 months	7	0.11	1,051,705	16,180	Illiquid	Illiquid
EUR-AUD_<1 week	30	0.46	581,413,720	8,944,826	Illiquid	Illiquid
EUR-AUD_1 week	142	2.18	2,533,992,099	38,984,494	Illiquid	Illiquid
EUR-AUD_1 month	753	11.58	7,751,341,291	119,251,404	Illiquid	Illiquid
EUR-AUD_3 months	852	13.11	19,443,890,577	299,136,778	Illiquid	Illiquid
EUR-AUD_6 months	293	4.51	5,664,320,301	87,143,389	Illiquid	Illiquid
EUR-AUD_1 year	100	1.54	792,187,110	12,187,494	Illiquid	Illiquid
EUR-AUD_2 years	24	0.37	202,678,223	3,118,127	Illiquid	Illiquid
EUR-AUD_4 years	1	0.02	4,519,219	69,526	Illiquid	Illiquid
EUR-BRL_1 week	3	0.05	20,153,527	310,054	Illiquid	Illiquid
EUR-BRL_1 month	18	0.28	402,490,536	6,192,162	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
EUR-BRL_ 3 months	48	0.74	337,322,195	5,189,572	Illiquid	Illiquid
EUR-BRL_ 6 months	71	1.09	2,279,816,768	35,074,104	Illiquid	Illiquid
EUR-BRL_ 1 year	60	0.92	1,705,657,089	26,240,878	Illiquid	Illiquid
EUR-BRL_ 2 years	15	0.23	228,191,027	3,510,631	Illiquid	Illiquid
EUR-BRL_ 3 years	8	0.12	358,712,641	5,518,656	Illiquid	Illiquid
EUR-CAD_ <1 week	10	0.15	125,058,419	1,923,976	Illiquid	Illiquid
EUR-CAD_ 1 week	62	0.95	1,073,887,767	16,521,350	Illiquid	Illiquid
EUR-CAD_ 1 month	341	5.25	3,154,410,855	48,529,398	Illiquid	Illiquid
EUR-CAD_ 3 months	374	5.75	6,853,995,794	105,446,089	Illiquid	Illiquid
EUR-CAD_ 6 months	151	2.32	2,198,278,448	33,819,668	Illiquid	Illiquid
EUR-CAD_ 1 year	115	1.77	1,200,136,607	18,463,640	Illiquid	Illiquid
EUR-CAD_ 2 years	22	0.34	224,403,876	3,452,367	Illiquid	Illiquid
EUR-CHF_ <1 week	181	2.78	5,654,985,666	86,999,779	Illiquid	Illiquid
EUR-CHF_ 1 week	123	1.89	4,740,227,570	72,926,578	Illiquid	Illiquid
EUR-CHF_ 1 month	553	8.51	17,526,062,560	269,631,732	Illiquid	Illiquid
EUR-CHF_ 3 months	2,059	31.68	29,273,693,824	450,364,520	Illiquid	Illiquid
EUR-CHF_ 6 months	778	11.97	23,161,264,434	356,327,145	Illiquid	Illiquid
EUR-CHF_ 1 year	686	10.55	15,683,571,463	241,285,715	Illiquid	Illiquid
EUR-CHF_ 2 years	252	3.88	3,593,938,014	55,291,354	Illiquid	Illiquid
EUR-CHF_ 3 years	94	1.45	1,580,381,861	24,313,567	Illiquid	Illiquid
EUR-CHF_ 4 years	10	0.15	207,559,703	3,193,226	Illiquid	Illiquid
EUR-CHF_ 5 years	27	0.42	452,535,503	6,962,085	Illiquid	Illiquid
EUR-CHF_ 6 years	44	0.68	1,350,174,173	20,771,910	Illiquid	Illiquid
EUR-CHF_ 7 years	2	0.03	16,398,449	252,284	Illiquid	Illiquid
EUR-CHF_ 8 years	25	0.38	556,266,584	8,557,947	Illiquid	Illiquid
EUR-CHF_ 10 years	2	0.03	102,143,714	1,571,442	Illiquid	Illiquid
EUR-CHF_ 11 years	8	0.12	292,746,031	4,503,785	Illiquid	Illiquid
EUR-CHF_ 13 years	2	0.03	45,651,509	702,331	Illiquid	Illiquid
EUR-CHF_ 9 years	4	0.06	56,874,314	874,989	Illiquid	Illiquid
EUR-CLP_ 3 months	10	0.15	100,361,785	1,544,027	Illiquid	Illiquid
EUR-CNH_ 1 month	3	0.05	35,000,000	538,462	Illiquid	Illiquid
EUR-CNH_ 6 months	4	0.06	38,316,381	589,483	Illiquid	Illiquid
EUR-CNH_ 1 year	2	0.03	100,000,000	1,538,462	Illiquid	Illiquid
EUR-CNY_ <1 week	12	0.18	12,122,774	186,504	Illiquid	Illiquid
EUR-CNY_ 1 week	1	0.02	14,973,288	230,358	Illiquid	Illiquid
EUR-CNY_ 1 month	62	0.95	577,742,606	8,888,348	Illiquid	Illiquid
EUR-CNY_ 3 months	56	0.86	2,201,165,610	33,864,086	Illiquid	Illiquid
EUR-CNY_ 6 months	35	0.54	606,645,213	9,333,003	Illiquid	Illiquid
EUR-CNY_ 1 year	85	1.31	1,919,054,363	29,523,913	Illiquid	Illiquid
EUR-CNY_ 2 years	200	3.08	5,668,915,993	87,214,092	Illiquid	Illiquid
EUR-CNY_ 3 years	20	0.31	607,785,502	9,350,546	Illiquid	Illiquid
EUR-CZK_ <1 week	35	0.54	55,905,073	860,078	Illiquid	Illiquid
EUR-CZK_ 1 week	10	0.15	58,223,302	895,743	Illiquid	Illiquid
EUR-CZK_ 1 month	116	1.78	689,867,053	10,613,339	Illiquid	Illiquid
EUR-CZK_ 3 months	172	2.65	792,820,314	12,197,236	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
EUR-CZK_6 months	189	2.91	520,630,753	8,009,704	Illiquid	Illiquid
EUR-CZK_1 year	355	5.46	933,247,436	14,357,653	Illiquid	Illiquid
EUR-CZK_2 years	332	5.11	663,705,830	10,210,859	Illiquid	Illiquid
EUR-CZK_3 years	135	2.08	192,815,456	2,966,392	Illiquid	Illiquid
EUR-CZK_4 years	9	0.14	1,686,653	25,949	Illiquid	Illiquid
EUR-DKK_<1 week	8	0.12	159,491,884	2,453,721	Illiquid	Illiquid
EUR-DKK_1 week	3	0.05	238,461,487	3,668,638	Illiquid	Illiquid
EUR-DKK_1 month	1	0.02	17,415,727	267,934	Illiquid	Illiquid
EUR-DKK_3 months	15	0.23	152,084,379	2,339,760	Illiquid	Illiquid
EUR-DKK_6 months	20	0.31	18,032,167	277,418	Illiquid	Illiquid
EUR-DKK_1 year	53	0.82	333,072,209	5,124,188	Illiquid	Illiquid
EUR-DKK_2 years	6	0.09	104,121,152	1,601,864	Illiquid	Illiquid
EUR-DKK_3 years	2	0.03	2,029,690	31,226	Illiquid	Illiquid
EUR-DKK_5 years	2	0.03	86,830	1,336	Illiquid	Illiquid
EUR-GBP_<1 week	556	8.55	11,004,605,990	169,301,631	Illiquid	Illiquid
EUR-GBP_1 week	353	5.43	9,610,187,291	147,849,035	Illiquid	Illiquid
EUR-GBP_1 month	2,174	33.45	31,282,786,857	481,273,644	Illiquid	Illiquid
EUR-GBP_3 months	2,110	32.46	56,645,723,581	871,472,670	Liquid	Illiquid
EUR-GBP_6 months	1,639	25.22	20,157,080,448	310,108,930	Illiquid	Illiquid
EUR-GBP_1 year	1,772	27.26	17,642,636,124	271,425,171	Illiquid	Illiquid
EUR-GBP_2 years	715	11.00	5,721,575,830	88,024,244	Illiquid	Illiquid
EUR-GBP_3 years	89	1.37	2,326,786,182	35,796,710	Illiquid	Illiquid
EUR-GBP_4 years	51	0.78	435,923,954	6,706,522	Illiquid	Illiquid
EUR-GBP_5 years	19	0.29	247,139,525	3,802,147	Illiquid	Illiquid
EUR-GBP_6 years	9	0.14	181,045,230	2,785,311	Illiquid	Illiquid
EUR-HKD_<1 week	1	0.02	337,414	5,191	Illiquid	Illiquid
EUR-HKD_1 week	12	0.18	956,431	14,714	Illiquid	Illiquid
EUR-HKD_1 month	478	7.35	77,425,438	1,191,161	Illiquid	Illiquid
EUR-HKD_3 months	108	1.66	11,729,247	180,450	Illiquid	Illiquid
EUR-HKD_6 months	24	0.37	15,058,597	231,671	Illiquid	Illiquid
EUR-HKD_1 year	35	0.54	179,119,069	2,755,678	Illiquid	Illiquid
EUR-HKD_2 years	27	0.42	102,169,163	1,571,833	Illiquid	Illiquid
EUR-HUF_<1 week	109	1.68	979,445,734	15,068,396	Illiquid	Illiquid
EUR-HUF_1 week	251	3.86	1,826,867,725	28,105,657	Illiquid	Illiquid
EUR-HUF_1 month	925	14.23	4,829,613,394	74,301,745	Illiquid	Illiquid
EUR-HUF_3 months	1,145	17.62	7,337,963,550	112,891,747	Illiquid	Illiquid
EUR-HUF_6 months	402	6.18	3,162,811,976	48,658,646	Illiquid	Illiquid
EUR-HUF_1 year	346	5.32	2,167,089,083	33,339,832	Illiquid	Illiquid
EUR-HUF_2 years	136	2.09	317,658,005	4,887,046	Illiquid	Illiquid
EUR-HUF_3 years	17	0.26	51,940,117	799,079	Illiquid	Illiquid
EUR-IDR_3 years	8	0.12	6,453,263	99,281	Illiquid	Illiquid
EUR-ILS_<1 week	9	0.14	95,182,373	1,464,344	Illiquid	Illiquid
EUR-ILS_1 week	8	0.12	75,957,232	1,168,573	Illiquid	Illiquid
EUR-ILS_1 month	57	0.88	867,215,671	13,341,780	Illiquid	Illiquid
EUR-ILS_3 months	105	1.62	1,217,993,989	18,738,369	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
		Num of trades		Notional Amount		Final Liquidity
EUR-ILS__6 months	57	0.88	718,277,622	11,050,425	Illiquid	Illiquid
EUR-ILS__1 year	35	0.54	287,038,771	4,415,981	Illiquid	Illiquid
EUR-ILS__2 years	30	0.46	218,667,320	3,364,113	Illiquid	Illiquid
EUR-INR__1 month	10	0.15	192,229,627	2,957,379	Illiquid	Illiquid
EUR-INR__3 months	26	0.40	425,507,482	6,546,269	Illiquid	Illiquid
EUR-INR__6 months	50	0.77	1,094,698,222	16,841,511	Illiquid	Illiquid
EUR-INR__1 year	38	0.58	136,968,688	2,107,211	Illiquid	Illiquid
EUR-INR__2 years	61	0.94	54,444,684	837,611	Illiquid	Illiquid
EUR-JPY__<1 week	148	2.28	1,872,040,753	28,800,627	Illiquid	Illiquid
EUR-JPY__1 week	302	4.65	12,532,375,826	192,805,782	Illiquid	Illiquid
EUR-JPY__1 month	1,306	20.09	17,169,573,298	264,147,282	Illiquid	Illiquid
EUR-JPY__3 months	2,111	32.48	26,863,247,918	413,280,737	Illiquid	Illiquid
EUR-JPY__6 months	673	10.35	13,143,701,089	202,210,786	Illiquid	Illiquid
EUR-JPY__1 year	720	11.08	7,879,866,710	121,228,719	Illiquid	Illiquid
EUR-JPY__2 years	450	6.92	4,565,592,869	70,239,890	Illiquid	Illiquid
EUR-JPY__3 years	131	2.02	1,415,437,685	21,775,964	Illiquid	Illiquid
EUR-JPY__4 years	19	0.29	315,141,118	4,848,325	Illiquid	Illiquid
EUR-JPY__5 years	25	0.38	325,620,031	5,009,539	Illiquid	Illiquid
EUR-JPY__6 years	30	0.46	426,348,243	6,559,204	Illiquid	Illiquid
EUR-JPY__7 years	13	0.20	146,633,300	2,255,897	Illiquid	Illiquid
EUR-JPY__8 years	2	0.03	16,000,000	246,154	Illiquid	Illiquid
EUR-KRW__1 month	1	0.02	10,000,000	153,846	Illiquid	Illiquid
EUR-KRW__3 months	1	0.02	6,756,757	103,950	Illiquid	Illiquid
EUR-KRW__6 months	3	0.05	80,000,000	1,230,769	Illiquid	Illiquid
EUR-KRW__1 year	1	0.02	50,000,000	769,231	Illiquid	Illiquid
EUR-KRW__2 years	18	0.28	301,548,469	4,639,207	Illiquid	Illiquid
EUR-KRW__3 years	6	0.09	60,296,828	927,644	Illiquid	Illiquid
EUR-KRW__4 years	1	0.02	1,552,512	23,885	Illiquid	Illiquid
EUR-MUR__6 months	4	0.06	6,083,396	93,591	Illiquid	Illiquid
EUR-MUR__1 year	6	0.09	6,177,061	95,032	Illiquid	Illiquid
EUR-MXN__<1 week	43	0.66	629,349,853	9,682,305	Illiquid	Illiquid
EUR-MXN__1 week	12	0.18	252,215,803	3,880,243	Illiquid	Illiquid
EUR-MXN__1 month	155	2.38	2,967,667,576	45,656,424	Illiquid	Illiquid
EUR-MXN__3 months	197	3.03	2,544,704,265	39,149,296	Illiquid	Illiquid
EUR-MXN__6 months	176	2.71	1,794,311,868	27,604,798	Illiquid	Illiquid
EUR-MXN__1 year	112	1.72	3,104,712,753	47,764,812	Illiquid	Illiquid
EUR-MXN__2 years	28	0.43	831,810,791	12,797,089	Illiquid	Illiquid
EUR-MXN__3 years	13	0.20	169,052,557	2,600,809	Illiquid	Illiquid
EUR-MYR__1 year	8	0.12	341,446,675	5,253,026	Illiquid	Illiquid
EUR-MYR__2 years	4	0.06	40,334,449	620,530	Illiquid	Illiquid
EUR-NOK__<1 week	107	1.65	1,900,429,236	29,237,373	Illiquid	Illiquid
EUR-NOK__1 week	164	2.52	3,126,589,526	48,101,377	Illiquid	Illiquid
EUR-NOK__1 month	724	11.14	8,492,582,752	130,655,119	Illiquid	Illiquid
EUR-NOK__3 months	888	13.66	9,472,755,382	145,734,698	Illiquid	Illiquid
EUR-NOK__6 months	328	5.05	4,194,567,733	64,531,811	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-NOK__1 year	254	3.91	2,329,088,602	35,832,132	Illiquid	Illiquid
EUR-NOK__2 years	97	1.49	925,103,931	14,232,368	Illiquid	Illiquid
EUR-NOK__3 years	16	0.25	152,637,425	2,348,268	Illiquid	Illiquid
EUR-NOK__4 years	1	0.02	20,000,000	307,692	Illiquid	Illiquid
EUR-NOK__5 years	2	0.03	135,944	2,091	Illiquid	Illiquid
EUR-NZD__<1 week	3	0.05	111,273,275	1,711,897	Illiquid	Illiquid
EUR-NZD__1 week	46	0.71	468,045,858	7,200,706	Illiquid	Illiquid
EUR-NZD__1 month	550	8.46	593,253,125	9,126,971	Illiquid	Illiquid
EUR-NZD__3 months	195	3.00	645,117,933	9,924,891	Illiquid	Illiquid
EUR-NZD__6 months	31	0.48	409,248,507	6,296,131	Illiquid	Illiquid
EUR-NZD__1 year	34	0.52	180,943,992	2,783,754	Illiquid	Illiquid
EUR-NZD__2 years	8	0.12	62,645,146	963,771	Illiquid	Illiquid
EUR-PEN__6 months	1	0.02	124,517	1,916	Illiquid	Illiquid
EUR-PLN__<1 week	77	1.18	659,054,970	10,139,307	Illiquid	Illiquid
EUR-PLN__1 week	120	1.85	1,422,733,027	21,888,200	Illiquid	Illiquid
EUR-PLN__1 month	860	13.23	10,989,049,200	169,062,295	Illiquid	Illiquid
EUR-PLN__3 months	683	10.51	16,288,994,299	250,599,912	Illiquid	Illiquid
EUR-PLN__6 months	277	4.26	3,448,219,342	53,049,528	Illiquid	Illiquid
EUR-PLN__1 year	313	4.82	4,175,343,185	64,236,049	Illiquid	Illiquid
EUR-PLN__2 years	172	2.65	599,655,496	9,225,469	Illiquid	Illiquid
EUR-PLN__3 years	22	0.34	106,213,665	1,634,056	Illiquid	Illiquid
EUR-RON__1 month	90	1.38	917,948,525	14,122,285	Illiquid	Illiquid
EUR-RON__3 months	46	0.71	34,689,659	533,687	Illiquid	Illiquid
EUR-RON__6 months	53	0.82	27,447,541	422,270	Illiquid	Illiquid
EUR-RON__1 year	83	1.28	91,184,770	1,402,843	Illiquid	Illiquid
EUR-RON__2 years	112	1.72	9,895,745	152,242	Illiquid	Illiquid
EUR-RUB__<1 week	16	0.25	191,681,253	2,948,942	Illiquid	Illiquid
EUR-RUB__1 week	13	0.20	124,131,407	1,909,714	Illiquid	Illiquid
EUR-RUB__1 month	70	1.08	862,365,441	13,267,161	Illiquid	Illiquid
EUR-RUB__3 months	164	2.52	1,326,048,333	20,400,744	Illiquid	Illiquid
EUR-RUB__6 months	151	2.32	2,144,709,149	32,995,525	Illiquid	Illiquid
EUR-RUB__1 year	154	2.37	2,711,807,240	41,720,111	Illiquid	Illiquid
EUR-RUB__2 years	97	1.49	557,990,048	8,584,462	Illiquid	Illiquid
EUR-SEK__<1 week	177	2.72	2,713,610,786	41,747,858	Illiquid	Illiquid
EUR-SEK__1 week	259	3.98	2,400,625,918	36,932,706	Illiquid	Illiquid
EUR-SEK__1 month	781	12.02	8,651,574,114	133,101,140	Illiquid	Illiquid
EUR-SEK__3 months	1,026	15.78	6,712,957,934	103,276,276	Illiquid	Illiquid
EUR-SEK__6 months	416	6.40	2,878,001,674	44,276,949	Illiquid	Illiquid
EUR-SEK__1 year	541	8.32	3,398,104,089	52,278,524	Illiquid	Illiquid
EUR-SEK__2 years	196	3.02	696,037,498	10,708,269	Illiquid	Illiquid
EUR-SEK__3 years	26	0.40	47,607,339	732,421	Illiquid	Illiquid
EUR-SEK__4 years	12	0.18	13,287,932	204,430	Illiquid	Illiquid
EUR-SGD__<1 week	1	0.02	6,173,295	94,974	Illiquid	Illiquid
EUR-SGD__1 week	2	0.03	100,000	1,538	Illiquid	Illiquid
EUR-SGD__1 month	56	0.86	355,158,004	5,463,969	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-SGD_3 months	24	0.37	342,030,423	5,262,007	Illiquid	Illiquid
EUR-SGD_6 months	27	0.42	550,944,185	8,476,064	Illiquid	Illiquid
EUR-SGD_1 year	8	0.12	52,454,901	806,998	Illiquid	Illiquid
EUR-SGD_2 years	12	0.18	48,767,873	750,275	Illiquid	Illiquid
EUR-THB_1 year	4	0.06	889,383	13,683	Illiquid	Illiquid
EUR-TRY_<1 week	57	0.88	454,130,601	6,986,625	Illiquid	Illiquid
EUR-TRY_1 week	84	1.29	509,993,258	7,846,050	Illiquid	Illiquid
EUR-TRY_1 month	326	5.02	2,748,820,171	42,289,541	Illiquid	Illiquid
EUR-TRY_3 months	391	6.02	4,319,690,030	66,456,770	Illiquid	Illiquid
EUR-TRY_6 months	228	3.51	4,201,426,299	64,637,328	Illiquid	Illiquid
EUR-TRY_1 year	410	6.31	5,102,388,809	78,498,289	Illiquid	Illiquid
EUR-TRY_2 years	221	3.40	2,379,369,130	36,605,679	Illiquid	Illiquid
EUR-TRY_3 years	14	0.22	144,599,144	2,224,602	Illiquid	Illiquid
EUR-TRY_4 years	6	0.09	1,138,128	17,510	Illiquid	Illiquid
EUR-TRY_5 years	1	0.02	189,688	2,918	Illiquid	Illiquid
EUR-TRY_6 years	1	0.02	25,000,000	384,615	Illiquid	Illiquid
EUR-USD_<1 week	2,303	35.43	66,049,217,702	1,016,141,811	Liquid	Liquid
EUR-USD_1 week	3,695	56.85	120,648,534,669	1,856,131,303	Liquid	Liquid
EUR-USD_1 month	12,242	188.34	299,642,132,501	4,609,878,962	Liquid	Liquid
EUR-USD_3 months	11,465	176.38	270,901,680,085	4,167,718,155	Liquid	Liquid
EUR-USD_6 months	7,913	121.74	191,185,198,667	2,941,310,749	Liquid	Liquid
EUR-USD_1 year	8,607	132.42	144,133,547,826	2,217,439,197	Liquid	Liquid
EUR-USD_2 years	3,459	53.22	59,154,715,638	910,072,548	Liquid	Liquid
EUR-USD_3 years	479	7.37	10,171,334,843	156,482,075	Illiquid	Illiquid
EUR-USD_4 years	212	3.26	5,050,863,725	77,705,596	Illiquid	Illiquid
EUR-USD_5 years	143	2.20	3,032,693,450	46,656,822	Illiquid	Illiquid
EUR-USD_6 years	162	2.49	3,775,180,825	58,079,705	Illiquid	Illiquid
EUR-USD_7 years	6	0.09	110,319,970	1,697,230	Illiquid	Illiquid
EUR-USD_8 years	45	0.69	679,581,873	10,455,106	Illiquid	Illiquid
EUR-USD_16 years	28	0.43	3,409,884,231	52,459,757	Illiquid	Illiquid
EUR-USD_10 years	3	0.05	158,100,732	2,432,319	Illiquid	Illiquid
EUR-USD_11 years	6	0.09	95,000,000	1,461,538	Illiquid	Illiquid
EUR-USD_15 years	2	0.03	26,963,193	414,818	Illiquid	Illiquid
EUR-USD_9 years	9	0.14	127,129,488	1,955,838	Illiquid	Illiquid
EUR-XAU_1 week	1	0.02	228,830	3,520	Illiquid	Illiquid
EUR-ZAR_<1 week	8	0.12	52,774,761	811,919	Illiquid	Illiquid
EUR-ZAR_1 week	21	0.32	155,322,902	2,389,583	Illiquid	Illiquid
EUR-ZAR_1 month	193	2.97	969,402,417	14,913,883	Illiquid	Illiquid
EUR-ZAR_3 months	63	0.97	476,391,254	7,329,096	Illiquid	Illiquid
EUR-ZAR_6 months	68	1.05	420,612,255	6,470,958	Illiquid	Illiquid
EUR-ZAR_1 year	50	0.77	338,659,800	5,210,151	Illiquid	Illiquid
EUR-ZAR_2 years	20	0.31	519,203,450	7,987,745	Illiquid	Illiquid
EUR-ZAR_3 years	18	0.28	265,377,494	4,082,731	Illiquid	Illiquid
GBP-AED_1 month	11	0.17	653,375	10,052	Illiquid	Illiquid
GBP-AUD_<1 week	15	0.23	270,964,645	4,168,687	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-AUD_1 week	58	0.89	491,255,619	7,557,779	Illiquid	Illiquid
GBP-AUD_1 month	784	12.06	2,852,034,339	43,877,451	Illiquid	Illiquid
GBP-AUD_3 months	428	6.58	3,093,352,111	47,590,032	Illiquid	Illiquid
GBP-AUD_6 months	89	1.37	1,045,818,505	16,089,515	Illiquid	Illiquid
GBP-AUD_1 year	62	0.95	1,004,903,539	15,460,054	Illiquid	Illiquid
GBP-AUD_2 years	7	0.11	8,914,497	137,146	Illiquid	Illiquid
GBP-CAD_<1 week	30	0.46	478,197,926	7,356,891	Illiquid	Illiquid
GBP-CAD_1 week	73	1.12	620,995,196	9,553,772	Illiquid	Illiquid
GBP-CAD_1 month	591	9.09	1,483,256,968	22,819,338	Illiquid	Illiquid
GBP-CAD_3 months	244	3.75	1,856,568,200	28,562,588	Illiquid	Illiquid
GBP-CAD_6 months	56	0.86	782,132,892	12,032,814	Illiquid	Illiquid
GBP-CAD_1 year	64	0.98	564,597,522	8,686,116	Illiquid	Illiquid
GBP-CAD_2 years	33	0.51	40,670,358	625,698	Illiquid	Illiquid
GBP-CAD_3 years	6	0.09	393,537,492	6,054,423	Illiquid	Illiquid
GBP-CHF_<1 week	34	0.52	929,647,211	14,302,265	Illiquid	Illiquid
GBP-CHF_1 week	9	0.14	121,429,138	1,868,141	Illiquid	Illiquid
GBP-CHF_1 month	158	2.43	3,880,057,996	59,693,200	Illiquid	Illiquid
GBP-CHF_3 months	138	2.12	1,535,410,919	23,621,706	Illiquid	Illiquid
GBP-CHF_6 months	48	0.74	1,378,818,710	21,212,596	Illiquid	Illiquid
GBP-CHF_1 year	48	0.74	619,594,506	9,532,223	Illiquid	Illiquid
GBP-CHF_2 years	59	0.91	257,344,652	3,959,148	Illiquid	Illiquid
GBP-CHF_3 years	4	0.06	229,351,738	3,528,488	Illiquid	Illiquid
GBP-CNY_<1 week	1	0.02	281,661	4,333	Illiquid	Illiquid
GBP-CNY_1 month	3	0.05	10,850,436	166,930	Illiquid	Illiquid
GBP-CNY_1 year	10	0.15	11,675,078	179,617	Illiquid	Illiquid
GBP-CNY_2 years	12	0.18	2,142,908	32,968	Illiquid	Illiquid
GBP-CZK_1 week	2	0.03	1,213,501	18,669	Illiquid	Illiquid
GBP-CZK_1 month	2	0.03	48,540	747	Illiquid	Illiquid
GBP-CZK_3 months	4	0.06	97,080	1,494	Illiquid	Illiquid
GBP-CZK_6 months	6	0.09	145,620	2,240	Illiquid	Illiquid
GBP-CZK_1 year	2	0.03	48,540	747	Illiquid	Illiquid
GBP-DKK_1 month	8	0.12	22,777,213	350,419	Illiquid	Illiquid
GBP-DKK_3 months	89	1.37	150,985,223	2,322,850	Illiquid	Illiquid
GBP-DKK_6 months	24	0.37	47,468,221	730,280	Illiquid	Illiquid
GBP-DKK_1 year	15	0.23	16,196,144	249,171	Illiquid	Illiquid
GBP-DKK_3 years	1	0.02	1,530,793	23,551	Illiquid	Illiquid
GBP-HKD_1 week	21	0.32	706,690	10,872	Illiquid	Illiquid
GBP-HKD_1 month	1,251	19.25	65,856,835	1,013,182	Illiquid	Illiquid
GBP-HKD_3 months	262	4.03	42,163,203	648,665	Illiquid	Illiquid
GBP-HKD_6 months	46	0.71	36,345,057	559,155	Illiquid	Illiquid
GBP-HUF_1 month	3	0.05	1,820,252	28,004	Illiquid	Illiquid
GBP-HUF_3 months	2	0.03	974,596	14,994	Illiquid	Illiquid
GBP-HUF_6 months	6	0.09	71,059,552	1,093,224	Illiquid	Illiquid
GBP-ILS_2 years	2	0.03	11,691,716	179,873	Illiquid	Illiquid
GBP-INR_6 months	3	0.05	153,898,773	2,367,673	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-INR__1 year	5	0.08	98,233,312	1,511,282	Illiquid	Illiquid
GBP-JPY__<1 week	35	0.54	140,712,349	2,164,805	Illiquid	Illiquid
GBP-JPY__1 week	128	1.97	1,267,943,097	19,506,817	Illiquid	Illiquid
GBP-JPY__1 month	674	10.37	3,090,748,329	47,549,974	Illiquid	Illiquid
GBP-JPY__3 months	367	5.65	4,509,513,708	69,377,134	Illiquid	Illiquid
GBP-JPY__6 months	245	3.77	4,453,492,039	68,515,262	Illiquid	Illiquid
GBP-JPY__1 year	185	2.85	2,944,459,245	45,299,373	Illiquid	Illiquid
GBP-JPY__2 years	24	0.37	495,532,608	7,623,579	Illiquid	Illiquid
GBP-MXN__6 months	9	0.14	96,472,963	1,484,199	Illiquid	Illiquid
GBP-MXN__2 years	2	0.03	1,436,069	22,093	Illiquid	Illiquid
GBP-NOK__<1 week	1	0.02	25,028,758	385,058	Illiquid	Illiquid
GBP-NOK__1 month	22	0.34	306,323,961	4,712,676	Illiquid	Illiquid
GBP-NOK__3 months	16	0.25	179,087,355	2,755,190	Illiquid	Illiquid
GBP-NOK__6 months	31	0.48	485,505,603	7,469,317	Illiquid	Illiquid
GBP-NOK__1 year	2	0.03	72,810	1,120	Illiquid	Illiquid
GBP-NOK__2 years	7	0.11	91,061,665	1,400,949	Illiquid	Illiquid
GBP-NZD__1 week	8	0.12	3,655,260	56,235	Illiquid	Illiquid
GBP-NZD__1 month	659	10.14	479,128,687	7,371,211	Illiquid	Illiquid
GBP-NZD__3 months	124	1.91	989,549,597	15,223,840	Illiquid	Illiquid
GBP-NZD__6 months	54	0.83	528,645,521	8,133,008	Illiquid	Illiquid
GBP-NZD__1 year	15	0.23	237,499,007	3,653,831	Illiquid	Illiquid
GBP-NZD__2 years	4	0.06	36,530,991	562,015	Illiquid	Illiquid
GBP-PLN__3 months	2	0.03	399,867	6,152	Illiquid	Illiquid
GBP-PLN__6 months	48	0.74	5,231,375	80,483	Illiquid	Illiquid
GBP-PLN__1 year	46	0.71	4,519,660	69,533	Illiquid	Illiquid
GBP-PLN__2 years	42	0.65	4,066,375	62,560	Illiquid	Illiquid
GBP-RON__3 months	5	0.08	2,123,627	32,671	Illiquid	Illiquid
GBP-RON__6 months	5	0.08	2,851,728	43,873	Illiquid	Illiquid
GBP-RON__1 year	6	0.09	2,912,403	44,806	Illiquid	Illiquid
GBP-RON__2 years	15	0.23	3,708,561	57,055	Illiquid	Illiquid
GBP-SEK__<1 week	14	0.22	234,101,775	3,601,566	Illiquid	Illiquid
GBP-SEK__1 week	15	0.23	55,661,772	856,335	Illiquid	Illiquid
GBP-SEK__1 month	66	1.02	936,511,467	14,407,869	Illiquid	Illiquid
GBP-SEK__3 months	63	0.97	1,586,107,423	24,401,653	Illiquid	Illiquid
GBP-SEK__6 months	56	0.86	292,753,857	4,503,905	Illiquid	Illiquid
GBP-SEK__1 year	58	0.89	60,479,657	930,456	Illiquid	Illiquid
GBP-SEK__2 years	28	0.43	19,918,280	306,435	Illiquid	Illiquid
GBP-SGD__1 week	3	0.05	18,225,585	280,394	Illiquid	Illiquid
GBP-SGD__1 month	145	2.23	15,429,431	237,376	Illiquid	Illiquid
GBP-SGD__3 months	70	1.08	46,608,388	717,052	Illiquid	Illiquid
GBP-SGD__6 months	7	0.11	7,094,396	109,145	Illiquid	Illiquid
GBP-SGD__1 year	6	0.09	18,360,396	282,468	Illiquid	Illiquid
GBP-THB__6 months	2	0.03	223,697	3,441	Illiquid	Illiquid
GBP-THB__1 year	12	0.18	1,879,055	28,909	Illiquid	Illiquid
GBP-THB__2 years	6	0.09	134,218	2,065	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-TRY__1 week	10	0.15	4,789,416	73,683	Illiquid	Illiquid
GBP-TRY__1 month	13	0.20	13,658,486	210,131	Illiquid	Illiquid
GBP-TRY__3 months	13	0.20	14,441,967	222,184	Illiquid	Illiquid
GBP-TRY__6 months	2	0.03	3,640,504	56,008	Illiquid	Illiquid
GBP-TRY__1 year	4	0.06	3,734,461	57,453	Illiquid	Illiquid
GBP-TRY__2 years	4	0.06	5,491,855	84,490	Illiquid	Illiquid
GBP-USD__<1 week	632	9.72	18,494,263,142	284,527,125	Illiquid	Illiquid
GBP-USD__1 week	801	12.32	15,346,116,424	236,094,099	Illiquid	Illiquid
GBP-USD__1 month	4,414	67.91	55,658,592,692	856,286,041	Liquid	Liquid
GBP-USD__3 months	2,760	42.46	43,499,345,139	669,220,694	Liquid	Liquid
GBP-USD__6 months	2,036	31.32	27,724,627,329	426,532,728	Illiquid	Illiquid
GBP-USD__1 year	3,286	50.55	22,103,578,552	340,055,055	Illiquid	Illiquid
GBP-USD__2 years	1,853	28.51	12,130,167,218	186,617,957	Illiquid	Illiquid
GBP-USD__3 years	355	5.46	2,104,725,937	32,380,399	Illiquid	Illiquid
GBP-USD__4 years	128	1.97	602,410,451	9,267,853	Illiquid	Illiquid
GBP-USD__5 years	14	0.22	4,867,608	74,886	Illiquid	Illiquid
GBP-USD__6 years	6	0.09	27,967,875	430,275	Illiquid	Illiquid
GBP-USD__11 years	1	0.02	4,854,005	74,677	Illiquid	Illiquid
GBP-ZAR__1 month	84	1.29	7,569,227	116,450	Illiquid	Illiquid
GBP-ZAR__3 months	13	0.20	93,194,031	1,433,754	Illiquid	Illiquid
GBP-ZAR__6 months	10	0.15	20,206,270	310,866	Illiquid	Illiquid
GBP-ZAR__1 year	18	0.28	1,937,144	29,802	Illiquid	Illiquid
GBP-ZAR__2 years	37	0.57	6,253,205	96,203	Illiquid	Illiquid
HKD-DKK__3 months	3	0.05	1,083,928	16,676	Illiquid	Illiquid
HKD-DKK__6 months	3	0.05	1,776,599	27,332	Illiquid	Illiquid
HKD-KRW__2 years	10	0.15	186,970,101	2,876,463	Illiquid	Illiquid
HKD-NOK__2 years	26	0.40	1,535,259	23,619	Illiquid	Illiquid
HKD-NZD__1 week	148	2.28	10,314,209	158,680	Illiquid	Illiquid
HKD-NZD__1 month	1,415	21.77	63,048,486	969,977	Illiquid	Illiquid
HKD-NZD__3 months	419	6.45	34,696,735	533,796	Illiquid	Illiquid
HKD-NZD__6 months	32	0.49	1,007,083	15,494	Illiquid	Illiquid
HUF-TRY__1 year	4	0.06	12,575,538	193,470	Illiquid	Illiquid
HUF-TRY__2 years	12	0.18	38,304,061	589,293	Illiquid	Illiquid
JPY-BRL__3 months	14	0.22	259,537,696	3,992,888	Illiquid	Illiquid
JPY-BRL__6 months	8	0.12	380,514,424	5,854,068	Illiquid	Illiquid
JPY-BRL__1 year	6	0.09	158,076,721	2,431,950	Illiquid	Illiquid
JPY-BRL__2 years	11	0.17	131,217,797	2,018,735	Illiquid	Illiquid
JPY-BRL__3 years	11	0.17	295,528,457	4,546,592	Illiquid	Illiquid
JPY-BRL__4 years	4	0.06	46,437,140	714,418	Illiquid	Illiquid
JPY-BRL__5 years	4	0.06	26,069,716	401,073	Illiquid	Illiquid
JPY-BRL__6 years	1	0.02	16,029,287	246,604	Illiquid	Illiquid
JPY-CNY__1 month	21	0.32	15,135,045	232,847	Illiquid	Illiquid
JPY-CNY__3 months	4	0.06	16,965,641	261,010	Illiquid	Illiquid
JPY-CNY__6 months	1	0.02	8,120,663	124,933	Illiquid	Illiquid
JPY-CNY__1 year	4	0.06	11,136,199	171,326	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-DKK_3 months	34	0.52	69,365,280	1,067,158	Illiquid	Illiquid
JPY-DKK_6 months	3	0.05	6,983,459	107,438	Illiquid	Illiquid
JPY-HKD_1 week	14	0.22	145,784	2,243	Illiquid	Illiquid
JPY-HKD_1 month	502	7.72	14,330,277	220,466	Illiquid	Illiquid
JPY-HKD_3 months	91	1.40	28,838,898	443,675	Illiquid	Illiquid
JPY-HKD_6 months	8	0.12	362,662	5,579	Illiquid	Illiquid
JPY-ILS_1 year	2	0.03	4,948,101	76,125	Illiquid	Illiquid
JPY-ILS_2 years	6	0.09	13,002,858	200,044	Illiquid	Illiquid
JPY-INR_3 months	2	0.03	3,673,728	56,519	Illiquid	Illiquid
JPY-INR_1 year	5	0.08	5,720,596	88,009	Illiquid	Illiquid
JPY-KRW_1 month	1	0.02	7,240,184	111,387	Illiquid	Illiquid
JPY-KRW_3 months	2	0.03	47,086,849	724,413	Illiquid	Illiquid
JPY-KRW_6 months	12	0.18	148,387,330	2,282,882	Illiquid	Illiquid
JPY-KRW_1 year	6	0.09	43,291,608	666,025	Illiquid	Illiquid
JPY-MXN_<1 week	3	0.05	35,476,901	545,798	Illiquid	Illiquid
JPY-MXN_1 week	3	0.05	37,688,489	579,823	Illiquid	Illiquid
JPY-MXN_1 month	37	0.57	213,944,873	3,291,460	Illiquid	Illiquid
JPY-MXN_3 months	76	1.17	299,422,238	4,606,496	Illiquid	Illiquid
JPY-MXN_6 months	69	1.06	130,878,005	2,013,508	Illiquid	Illiquid
JPY-MXN_1 year	22	0.34	514,361,586	7,913,255	Illiquid	Illiquid
JPY-MXN_2 years	15	0.23	163,579,772	2,516,612	Illiquid	Illiquid
JPY-MXN_3 years	7	0.11	109,801,009	1,689,246	Illiquid	Illiquid
JPY-MYR_3 months	2	0.03	21,456,468	330,100	Illiquid	Illiquid
JPY-NOK_1 month	6	0.09	74,590,442	1,147,545	Illiquid	Illiquid
JPY-NOK_3 months	5	0.08	79,631,239	1,225,096	Illiquid	Illiquid
JPY-NOK_6 months	15	0.23	24,283,141	373,587	Illiquid	Illiquid
JPY-NOK_1 year	9	0.14	1,277,168	19,649	Illiquid	Illiquid
JPY-NOK_2 years	20	0.31	3,154,776	48,535	Illiquid	Illiquid
JPY-NZD_<1 week	14	0.22	174,297,574	2,681,501	Illiquid	Illiquid
JPY-NZD_1 week	28	0.43	45,427,217	698,880	Illiquid	Illiquid
JPY-NZD_1 month	259	3.98	817,104,976	12,570,846	Illiquid	Illiquid
JPY-NZD_3 months	218	3.35	1,736,095,878	26,709,167	Illiquid	Illiquid
JPY-NZD_6 months	78	1.20	1,114,846,735	17,151,488	Illiquid	Illiquid
JPY-NZD_1 year	29	0.45	324,836,575	4,997,486	Illiquid	Illiquid
JPY-NZD_2 years	5	0.08	52,602,726	809,273	Illiquid	Illiquid
JPY-NZD_3 years	4	0.06	1,244,668	19,149	Illiquid	Illiquid
JPY-NZD_5 years	2	0.03	4,910,003	75,539	Illiquid	Illiquid
JPY-PLN_3 months	4	0.06	9,551,017	146,939	Illiquid	Illiquid
JPY-RUB_1 week	4	0.06	5,483,541	84,362	Illiquid	Illiquid
JPY-RUB_3 months	2	0.03	20,349,550	313,070	Illiquid	Illiquid
JPY-RUB_6 months	7	0.11	11,040,161	169,849	Illiquid	Illiquid
JPY-SEK_1 month	4	0.06	26,580,740	408,934	Illiquid	Illiquid
JPY-SEK_3 months	8	0.12	25,363,798	390,212	Illiquid	Illiquid
JPY-SEK_6 months	3	0.05	158,876	2,444	Illiquid	Illiquid
JPY-SEK_1 year	9	0.14	792,762	12,196	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-SEK__2 years	1	0.02	106,431	1,637	Illiquid	Illiquid
JPY-SGD__1 month	38	0.58	351,676,503	5,410,408	Illiquid	Illiquid
JPY-SGD__3 months	14	0.22	90,349,907	1,389,999	Illiquid	Illiquid
JPY-SGD__6 months	3	0.05	60,126,146	925,018	Illiquid	Illiquid
JPY-SGD__1 year	23	0.35	325,570,406	5,008,775	Illiquid	Illiquid
JPY-SGD__2 years	4	0.06	46,425,357	714,236	Illiquid	Illiquid
JPY-THB__<1 week	2	0.03	5,108,674	78,595	Illiquid	Illiquid
JPY-THB__3 months	2	0.03	20,895,895	321,475	Illiquid	Illiquid
JPY-TRY__1 week	1	0.02	8,449,008	129,985	Illiquid	Illiquid
JPY-TRY__1 month	8	0.12	63,187,823	972,120	Illiquid	Illiquid
JPY-TRY__3 months	22	0.34	217,518,560	3,346,439	Illiquid	Illiquid
JPY-TRY__6 months	26	0.40	401,283,181	6,173,587	Illiquid	Illiquid
JPY-TRY__1 year	4	0.06	204,465,982	3,145,630	Illiquid	Illiquid
JPY-TRY__2 years	9	0.14	109,087,356	1,678,267	Illiquid	Illiquid
JPY-TRY__3 years	13	0.20	179,254,143	2,757,756	Illiquid	Illiquid
JPY-TRY__4 years	22	0.34	77,703,349	1,195,436	Illiquid	Illiquid
JPY-TRY__5 years	57	0.88	44,645,206	686,849	Illiquid	Illiquid
JPY-TRY__6 years	1	0.02	1,689,802	25,997	Illiquid	Illiquid
JPY-TWD__3 months	2	0.03	2,680,937	41,245	Illiquid	Illiquid
JPY-ZAR__1 month	51	0.78	60,851,227	936,173	Illiquid	Illiquid
JPY-ZAR__3 months	26	0.40	97,579,964	1,501,230	Illiquid	Illiquid
JPY-ZAR__2 years	2	0.03	13,339,315	205,220	Illiquid	Illiquid
MXN-DKK__1 month	1	0.02	202,576	3,117	Illiquid	Illiquid
MXN-DKK__3 months	1	0.02	333,002	5,123	Illiquid	Illiquid
MYR-SGD__1 month	4	0.06	189,556,535	2,916,254	Illiquid	Illiquid
MYR-SGD__3 months	10	0.15	439,747,790	6,765,351	Illiquid	Illiquid
MYR-SGD__6 months	2	0.03	13,922,653	214,195	Illiquid	Illiquid
NOK-DKK__1 week	1	0.02	182,248	2,804	Illiquid	Illiquid
NOK-DKK__1 month	30	0.46	36,777,022	565,800	Illiquid	Illiquid
NOK-DKK__3 months	58	0.89	80,519,727	1,238,765	Illiquid	Illiquid
NOK-DKK__6 months	10	0.15	8,081,045	124,324	Illiquid	Illiquid
NOK-DKK__1 year	12	0.18	3,691,935	56,799	Illiquid	Illiquid
NOK-DKK__2 years	1	0.02	364,496	5,608	Illiquid	Illiquid
NOK-SEK__<1 week	35	0.54	567,180,827	8,725,859	Illiquid	Illiquid
NOK-SEK__1 week	46	0.71	575,467,844	8,853,351	Illiquid	Illiquid
NOK-SEK__1 month	244	3.75	2,657,109,134	40,878,602	Illiquid	Illiquid
NOK-SEK__3 months	380	5.85	2,785,094,250	42,847,604	Illiquid	Illiquid
NOK-SEK__6 months	211	3.25	2,370,098,850	36,463,059	Illiquid	Illiquid
NOK-SEK__1 year	223	3.43	2,476,864,066	38,105,601	Illiquid	Illiquid
NOK-SEK__2 years	23	0.35	58,469,052	899,524	Illiquid	Illiquid
NZD-DKK__3 months	1	0.02	933,501	14,362	Illiquid	Illiquid
NZD-DKK__6 months	1	0.02	832,472	12,807	Illiquid	Illiquid
NZD-DKK__1 year	1	0.02	622,334	9,574	Illiquid	Illiquid
NZD-MXN__1 year	1	0.02	1,431,368	22,021	Illiquid	Illiquid
NZD-NOK__1 month	2	0.03	32,624,950	501,922	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
NZD-NOK__3 months	14	0.22	74,695,787	1,149,166	Illiquid	Illiquid
NZD-NOK__6 months	18	0.28	207,443,303	3,191,435	Illiquid	Illiquid
NZD-NOK__1 year	6	0.09	56,034,438	862,068	Illiquid	Illiquid
NZD-SEK__<1 week	4	0.06	24,893,350	382,975	Illiquid	Illiquid
NZD-SEK__3 months	9	0.14	95,600,626	1,470,779	Illiquid	Illiquid
NZD-SEK__6 months	1	0.02	39,309,082	604,755	Illiquid	Illiquid
NZD-SEK__1 year	2	0.03	151,523	2,331	Illiquid	Illiquid
NZD-SGD__1 month	36	0.55	4,009,758	61,689	Illiquid	Illiquid
NZD-SGD__3 months	29	0.45	253,296,080	3,896,863	Illiquid	Illiquid
NZD-SGD__6 months	1	0.02	85,484	1,315	Illiquid	Illiquid
NZD-ZAR__1 month	45	0.69	2,509,955	38,615	Illiquid	Illiquid
NZD-ZAR__3 months	4	0.06	249,137	3,833	Illiquid	Illiquid
NZD-ZAR__6 months	2	0.03	53,083,701	816,672	Illiquid	Illiquid
PLN-CZK__6 months	2	0.03	644,694	9,918	Illiquid	Illiquid
PLN-CZK__1 year	6	0.09	912,122	14,033	Illiquid	Illiquid
PLN-DKK__3 months	2	0.03	1,421,525	21,870	Illiquid	Illiquid
PLN-DKK__6 months	1	0.02	478,263	7,358	Illiquid	Illiquid
PLN-DKK__1 year	6	0.09	2,869,576	44,147	Illiquid	Illiquid
PLN-DKK__2 years	5	0.08	2,391,313	36,789	Illiquid	Illiquid
PLN-NOK__3 months	1	0.02	121,499	1,869	Illiquid	Illiquid
PLN-SEK__2 years	3	0.05	1,856,046	28,555	Illiquid	Illiquid
RUB-DKK__2 years	2	0.03	40,796	628	Illiquid	Illiquid
SEK-DKK__<1 week	4	0.06	1,336,968	20,569	Illiquid	Illiquid
SEK-DKK__1 week	3	0.05	1,002,726	15,427	Illiquid	Illiquid
SEK-DKK__1 month	14	0.22	4,879,933	75,076	Illiquid	Illiquid
SEK-DKK__3 months	30	0.46	30,626,765	471,181	Illiquid	Illiquid
SEK-DKK__6 months	29	0.45	30,773,014	473,431	Illiquid	Illiquid
SEK-DKK__1 year	15	0.23	12,948,205	199,203	Illiquid	Illiquid
SEK-DKK__2 years	1	0.02	535,869	8,244	Illiquid	Illiquid
SGD-CNY__1 month	11	0.17	4,139,075	63,678	Illiquid	Illiquid
SGD-CNY__3 months	9	0.14	3,902,273	60,035	Illiquid	Illiquid
SGD-CNY__6 months	1	0.02	6,916,857	106,413	Illiquid	Illiquid
SGD-CNY__1 year	4	0.06	34,343,913	528,368	Illiquid	Illiquid
SGD-CNY__2 years	1	0.02	5,954,290	91,604	Illiquid	Illiquid
SGD-DKK__1 month	2	0.03	1,165,849	17,936	Illiquid	Illiquid
SGD-DKK__3 months	4	0.06	4,453,310	68,512	Illiquid	Illiquid
SGD-HKD__1 week	1	0.02	49,155	756	Illiquid	Illiquid
SGD-HKD__1 month	89	1.37	2,873,752	44,212	Illiquid	Illiquid
SGD-HKD__3 months	26	0.40	1,493,861	22,982	Illiquid	Illiquid
SGD-HKD__6 months	2	0.03	594,082	9,140	Illiquid	Illiquid
SGD-INR__1 year	4	0.06	9,292,849	142,967	Illiquid	Illiquid
SGD-INR__2 years	8	0.12	90,932,422	1,398,960	Illiquid	Illiquid
TRY-DKK__1 week	1	0.02	506,940	7,799	Illiquid	Illiquid
TRY-DKK__1 month	3	0.05	3,210,623	49,394	Illiquid	Illiquid
TRY-DKK__3 months	6	0.09	7,809,145	120,141	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
TRY-DKK_6 months	1	0.02	1,689,802	25,997	Illiquid	Illiquid
TRY-DKK_1 year	3	0.05	1,977,068	30,416	Illiquid	Illiquid
TRY-DKK_2 years	2	0.03	422,450	6,499	Illiquid	Illiquid
TRY-ZAR_3 months	1	0.02	6,981,810	107,412	Illiquid	Illiquid
TRY-ZAR_1 year	2	0.03	13,518,412	207,976	Illiquid	Illiquid
USD-AED_1 week	2	0.03	36,254,388	557,760	Illiquid	Illiquid
USD-AED_3 months	6	0.09	47,854,845	736,228	Illiquid	Illiquid
USD-AED_6 months	8	0.12	89,895,640	1,383,010	Illiquid	Illiquid
USD-AED_1 year	16	0.25	179,775,485	2,765,777	Illiquid	Illiquid
USD-AED_2 years	26	0.40	142,081,899	2,185,875	Illiquid	Illiquid
USD-AED_3 years	2	0.03	5,800,228	89,234	Illiquid	Illiquid
USD-BRL_<1 week	42	0.65	454,020,655	6,984,933	Illiquid	Illiquid
USD-BRL_1 week	53	0.82	873,439,503	13,437,531	Illiquid	Illiquid
USD-BRL_1 month	396	6.09	6,706,594,469	103,178,376	Illiquid	Illiquid
USD-BRL_3 months	934	14.37	19,219,677,544	295,687,347	Illiquid	Illiquid
USD-BRL_6 months	524	8.06	10,630,997,076	163,553,801	Illiquid	Illiquid
USD-BRL_1 year	486	7.48	14,206,921,092	218,568,017	Illiquid	Illiquid
USD-BRL_2 years	183	2.82	10,433,276,809	160,511,951	Illiquid	Illiquid
USD-BRL_3 years	17	0.26	176,433,885	2,714,367	Illiquid	Illiquid
USD-BRL_4 years	2	0.03	16,932,414	260,499	Illiquid	Illiquid
USD-CAD_<1 week	810	12.46	17,834,354,652	274,374,687	Illiquid	Illiquid
USD-CAD_1 week	982	15.11	21,692,253,880	333,726,983	Illiquid	Illiquid
USD-CAD_1 month	3,463	53.28	64,703,067,936	995,431,814	Liquid	Liquid
USD-CAD_3 months	2,472	38.03	73,393,123,186	1,129,124,972	Liquid	Liquid
USD-CAD_6 months	1,343	20.66	24,506,762,201	377,027,111	Illiquid	Liquid
USD-CAD_1 year	1,572	24.18	34,976,673,754	538,102,673	Liquid	Liquid
USD-CAD_2 years	404	6.22	6,022,058,370	92,647,052	Illiquid	Illiquid
USD-CAD_3 years	26	0.40	192,466,439	2,961,022	Illiquid	Illiquid
USD-CAD_4 years	6	0.09	36,816,268	566,404	Illiquid	Illiquid
USD-CAD_6 years	1	0.02	29,009,309	446,297	Illiquid	Illiquid
USD-CHF_<1 week	118	1.82	2,434,788,183	37,458,280	Illiquid	Illiquid
USD-CHF_1 week	270	4.15	3,548,686,823	54,595,182	Illiquid	Illiquid
USD-CHF_1 month	952	14.65	20,274,036,621	311,908,256	Illiquid	Illiquid
USD-CHF_3 months	1,164	17.91	27,323,987,583	420,369,040	Illiquid	Illiquid
USD-CHF_6 months	550	8.46	14,877,739,200	228,888,295	Illiquid	Illiquid
USD-CHF_1 year	504	7.75	10,662,044,099	164,031,448	Illiquid	Illiquid
USD-CHF_2 years	144	2.22	1,862,218,404	28,649,514	Illiquid	Illiquid
USD-CHF_3 years	24	0.37	531,585,673	8,178,241	Illiquid	Illiquid
USD-CHF_4 years	69	1.06	1,255,526,474	19,315,792	Illiquid	Illiquid
USD-CHF_5 years	41	0.63	537,846,318	8,274,559	Illiquid	Illiquid
USD-CHF_6 years	2	0.03	17,541,992	269,877	Illiquid	Illiquid
USD-CHF_7 years	1	0.02	6,527,094	100,417	Illiquid	Illiquid
USD-CHF_8 years	14	0.22	40,553,118	623,894	Illiquid	Illiquid
USD-CHF_21 years	4	0.06	72,523,272	1,115,743	Illiquid	Illiquid
USD-CLP_1 week	1	0.02	7,185,814	110,551	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-CLP__1 month	29	0.45	740,019,007	11,384,908	Illiquid	Illiquid
USD-CLP__3 months	52	0.80	1,109,446,638	17,068,410	Illiquid	Illiquid
USD-CLP__6 months	49	0.75	718,418,540	11,052,593	Illiquid	Illiquid
USD-CLP__1 year	21	0.32	528,699,656	8,133,841	Illiquid	Illiquid
USD-CLP__2 years	6	0.09	26,627,437	409,653	Illiquid	Illiquid
USD-CNH__<1 week	2	0.03	10,878,491	167,361	Illiquid	Illiquid
USD-CNH__1 week	1	0.02	350,344	5,390	Illiquid	Illiquid
USD-CNH__1 month	23	0.35	21,811,180	335,557	Illiquid	Illiquid
USD-CNH__3 months	34	0.52	3,669,223	56,450	Illiquid	Illiquid
USD-CNH__6 months	489	7.52	737,310	11,343	Illiquid	Illiquid
USD-CNH__1 year	108	1.66	41,502,605	638,502	Illiquid	Illiquid
USD-CNH__2 years	69	1.06	46,937,771	722,120	Illiquid	Illiquid
USD-CNY__<1 week	236	3.63	5,832,983,082	89,738,201	Illiquid	Illiquid
USD-CNY__1 week	142	2.18	4,683,225,303	72,049,620	Illiquid	Illiquid
USD-CNY__1 month	837	12.88	35,331,230,567	543,557,393	Liquid	Liquid
USD-CNY__3 months	2,219	34.14	104,046,545,997	1,600,716,092	Liquid	Liquid
USD-CNY__6 months	2,954	45.45	129,942,661,656	1,999,117,872	Liquid	Liquid
USD-CNY__1 year	6,727	103.49	325,921,135,260	5,014,171,312	Liquid	Liquid
USD-CNY__2 years	5,306	81.63	326,408,982,187	5,021,676,649	Liquid	Liquid
USD-CNY__3 years	1,141	17.55	74,820,995,215	1,151,092,234	Liquid	Liquid
USD-CNY__4 years	4	0.06	146,187,177	2,249,033	Illiquid	Illiquid
USD-COP__<1 week	2	0.03	2,873,706	44,211	Illiquid	Illiquid
USD-COP__1 month	4	0.06	29,025,625	446,548	Illiquid	Illiquid
USD-COP__3 months	4	0.06	14,554,354	223,913	Illiquid	Illiquid
USD-COP__6 months	34	0.52	330,035,163	5,077,464	Illiquid	Illiquid
USD-COP__1 year	9	0.14	47,568,795	731,828	Illiquid	Illiquid
USD-COP__2 years	3	0.05	21,756,982	334,723	Illiquid	Illiquid
USD-CZK__<1 week	3	0.05	4,351,396	66,945	Illiquid	Illiquid
USD-CZK__1 week	4	0.06	5,331,851	82,028	Illiquid	Illiquid
USD-CZK__1 month	25	0.38	55,843,758	859,135	Illiquid	Illiquid
USD-CZK__3 months	34	0.52	40,014,777	615,612	Illiquid	Illiquid
USD-CZK__6 months	21	0.32	6,102,315	93,882	Illiquid	Illiquid
USD-CZK__1 year	50	0.77	98,332,691	1,512,811	Illiquid	Illiquid
USD-CZK__2 years	11	0.17	19,594,183	301,449	Illiquid	Illiquid
USD-CZK__3 years	3	0.05	1,160,372	17,852	Illiquid	Illiquid
USD-DKK__<1 week	3	0.05	2,900,931	44,630	Illiquid	Illiquid
USD-DKK__1 week	9	0.14	7,611,726	117,103	Illiquid	Illiquid
USD-DKK__1 month	11	0.17	14,726,297	226,558	Illiquid	Illiquid
USD-DKK__3 months	68	1.05	588,352,592	9,051,578	Illiquid	Illiquid
USD-DKK__6 months	63	0.97	176,705,119	2,718,540	Illiquid	Illiquid
USD-DKK__1 year	94	1.45	258,841,100	3,982,171	Illiquid	Illiquid
USD-DKK__2 years	7	0.11	7,415,893	114,091	Illiquid	Illiquid
USD-DKK__3 years	1	0.02	1,813,082	27,894	Illiquid	Illiquid
USD-DKK__4 years	7	0.11	45,327,045	697,339	Illiquid	Illiquid
USD-DKK__5 years	4	0.06	7,252,327	111,574	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-HKD <1 week	21	0.32	916,039,438	14,092,914	Illiquid	Illiquid
USD-HKD 1 month	11	0.17	149,084,633	2,293,610	Illiquid	Illiquid
USD-HKD 3 months	118	1.82	4,909,177,505	75,525,808	Illiquid	Illiquid
USD-HKD 6 months	92	1.42	3,153,270,409	48,511,852	Illiquid	Illiquid
USD-HKD 1 year	127	1.95	6,250,227,704	96,157,349	Illiquid	Illiquid
USD-HKD 2 years	107	1.65	3,365,051,715	51,770,026	Illiquid	Illiquid
USD-HKD 3 years	10	0.15	92,101,083	1,416,940	Illiquid	Illiquid
USD-HUF <1 week	19	0.29	316,137,650	4,863,656	Illiquid	Illiquid
USD-HUF 1 week	22	0.34	170,171,764	2,618,027	Illiquid	Illiquid
USD-HUF 1 month	222	3.42	632,562,352	9,731,728	Illiquid	Illiquid
USD-HUF 3 months	335	5.15	672,360,657	10,344,010	Illiquid	Illiquid
USD-HUF 6 months	102	1.57	52,033,947	800,522	Illiquid	Illiquid
USD-HUF 1 year	28	0.43	142,918,408	2,198,745	Illiquid	Illiquid
USD-HUF 2 years	17	0.26	23,062,400	354,806	Illiquid	Illiquid
USD-IDR 3 months	8	0.12	149,341,954	2,297,569	Illiquid	Illiquid
USD-IDR 6 months	10	0.15	136,071,841	2,093,413	Illiquid	Illiquid
USD-IDR 1 year	67	1.03	720,884,142	11,090,525	Illiquid	Illiquid
USD-IDR 2 years	23	0.35	211,595,474	3,255,315	Illiquid	Illiquid
USD-IDR 3 years	16	0.25	49,377,202	759,649	Illiquid	Illiquid
USD-IDR 4 years	22	0.34	141,993,060	2,184,509	Illiquid	Illiquid
USD-IDR 5 years	6	0.09	105,487,841	1,622,890	Illiquid	Illiquid
USD-ILS <1 week	13	0.20	189,548,665	2,916,133	Illiquid	Illiquid
USD-ILS 1 week	30	0.46	415,018,307	6,384,897	Illiquid	Illiquid
USD-ILS 1 month	176	2.71	3,688,052,342	56,739,267	Illiquid	Illiquid
USD-ILS 3 months	234	3.60	5,039,720,672	77,534,164	Illiquid	Illiquid
USD-ILS 6 months	76	1.17	1,778,968,672	27,368,749	Illiquid	Illiquid
USD-ILS 1 year	102	1.57	838,412,548	12,898,655	Illiquid	Illiquid
USD-ILS 2 years	29	0.45	151,958,145	2,337,818	Illiquid	Illiquid
USD-ILS 3 years	1	0.02	6,179,907	95,075	Illiquid	Illiquid
USD-INR <1 week	55	0.85	419,188,318	6,449,051	Illiquid	Illiquid
USD-INR 1 week	60	0.92	345,589,284	5,316,758	Illiquid	Illiquid
USD-INR 1 month	667	10.26	7,608,166,830	117,048,720	Illiquid	Illiquid
USD-INR 3 months	873	13.43	14,454,571,663	222,378,026	Illiquid	Illiquid
USD-INR 6 months	431	6.63	7,653,887,781	117,752,120	Illiquid	Illiquid
USD-INR 1 year	366	5.63	4,945,062,575	76,077,886	Illiquid	Illiquid
USD-INR 2 years	279	4.29	720,052,126	11,077,725	Illiquid	Illiquid
USD-INR 3 years	24	0.37	92,083,208	1,416,665	Illiquid	Illiquid
USD-INR 4 years	7	0.11	21,161,194	325,557	Illiquid	Illiquid
USD-INR 6 years	1	0.02	48,173,034	741,124	Illiquid	Illiquid
USD-JPY <1 week	1,145	17.62	32,618,244,286	501,819,143	Liquid	Liquid
USD-JPY 1 week	2,824	43.45	88,088,732,411	1,355,211,268	Liquid	Liquid
USD-JPY 1 month	9,229	141.98	223,457,703,767	3,437,810,827	Liquid	Liquid
USD-JPY 3 months	9,227	141.95	331,193,151,058	5,095,279,247	Liquid	Liquid
USD-JPY 6 months	4,409	67.83	162,497,054,492	2,499,954,684	Liquid	Liquid
USD-JPY 1 year	2,895	44.54	82,421,240,264	1,268,019,081	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-JPY__2 years	1,870	28.77	43,714,517,386	672,531,037	Liquid	Liquid
USD-JPY__3 years	937	14.42	32,684,871,114	502,844,171	Liquid	Liquid
USD-JPY__4 years	629	9.68	15,621,437,257	240,329,804	Illiquid	Illiquid
USD-JPY__5 years	571	8.78	11,728,392,999	180,436,815	Illiquid	Illiquid
USD-JPY__6 years	393	6.05	10,554,377,225	162,375,034	Illiquid	Illiquid
USD-JPY__7 years	162	2.49	5,023,143,158	77,279,126	Illiquid	Illiquid
USD-JPY__8 years	178	2.74	4,492,421,644	69,114,179	Illiquid	Illiquid
USD-JPY__16 years	18	0.28	278,151,245	4,279,250	Illiquid	Illiquid
USD-JPY__10 years	164	2.52	3,849,007,181	59,215,495	Illiquid	Illiquid
USD-JPY__11 years	103	1.58	1,411,226,380	21,711,175	Illiquid	Illiquid
USD-JPY__12 years	50	0.77	897,624,768	13,809,612	Illiquid	Illiquid
USD-JPY__13 years	22	0.34	394,045,488	6,062,238	Illiquid	Illiquid
USD-JPY__14 years	30	0.46	502,251,555	7,726,947	Illiquid	Illiquid
USD-JPY__15 years	37	0.57	650,158,665	10,002,441	Illiquid	Illiquid
USD-JPY__17 years	17	0.26	201,054,620	3,093,148	Illiquid	Illiquid
USD-JPY__18 years	7	0.11	80,613,453	1,240,207	Illiquid	Illiquid
USD-JPY__19 years	9	0.14	62,594,728	962,996	Illiquid	Illiquid
USD-JPY__20 years	4	0.06	429,747,293	6,611,497	Illiquid	Illiquid
USD-JPY__21 years	9	0.14	59,974,072	922,678	Illiquid	Illiquid
USD-JPY__22 years	8	0.12	142,333,327	2,189,743	Illiquid	Illiquid
USD-JPY__25 years	4	0.06	205,624,119	3,163,448	Illiquid	Illiquid
USD-JPY__26 years	4	0.06	51,909,092	798,601	Illiquid	Illiquid
USD-JPY__27 years	10	0.15	123,363,042	1,897,893	Illiquid	Illiquid
USD-JPY__9 years	112	1.72	3,720,934,876	57,245,152	Illiquid	Illiquid
USD-KRW__<1 week	3	0.05	23,721,193,916	364,941,445	Illiquid	Illiquid
USD-KRW__1 week	6	0.09	37,131,594	571,255	Illiquid	Illiquid
USD-KRW__1 month	56	0.86	16,478,919,865	253,521,844	Illiquid	Illiquid
USD-KRW__3 months	247	3.80	5,495,262,043	84,542,493	Illiquid	Illiquid
USD-KRW__6 months	232	3.57	7,496,589,457	115,332,145	Illiquid	Illiquid
USD-KRW__1 year	188	2.89	2,660,676,519	40,933,485	Illiquid	Illiquid
USD-KRW__2 years	46	0.71	727,393,204	11,190,665	Illiquid	Illiquid
USD-KRW__3 years	16	0.25	343,019,770	5,277,227	Illiquid	Illiquid
USD-KRW__4 years	2	0.03	14,425,884	221,937	Illiquid	Illiquid
USD-KWD__3 months	1	0.02	1,880,690	28,934	Illiquid	Illiquid
USD-MUR__6 months	4	0.06	4,065,254	62,542	Illiquid	Illiquid
USD-MUR__1 year	4	0.06	4,103,879	63,137	Illiquid	Illiquid
USD-MXN__<1 week	330	5.08	3,668,212,262	56,434,035	Illiquid	Illiquid
USD-MXN__1 week	239	3.68	3,794,372,095	58,374,955	Illiquid	Illiquid
USD-MXN__1 month	1,245	19.15	21,696,056,827	333,785,490	Illiquid	Illiquid
USD-MXN__3 months	1,874	28.83	29,343,559,258	451,439,373	Illiquid	Illiquid
USD-MXN__6 months	649	9.98	10,838,875,908	166,751,937	Illiquid	Illiquid
USD-MXN__1 year	559	8.60	8,069,108,556	124,140,132	Illiquid	Illiquid
USD-MXN__2 years	101	1.55	1,713,396,730	26,359,950	Illiquid	Illiquid
USD-MXN__3 years	9	0.14	82,813,178	1,274,049	Illiquid	Illiquid
USD-MXN__4 years	2	0.03	29,009,309	446,297	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-MYR__1 week	2	0.03	72,523,272	1,115,743	Illiquid	Illiquid
USD-MYR__1 month	14	0.22	316,357,756	4,867,042	Illiquid	Illiquid
USD-MYR__3 months	82	1.26	2,172,293,347	33,419,898	Illiquid	Illiquid
USD-MYR__6 months	25	0.38	640,555,460	9,854,699	Illiquid	Illiquid
USD-MYR__1 year	32	0.49	525,933,966	8,091,292	Illiquid	Illiquid
USD-NOK__<1 week	2	0.03	43,876,263	675,019	Illiquid	Illiquid
USD-NOK__1 week	77	1.18	1,064,680,572	16,379,701	Illiquid	Illiquid
USD-NOK__1 month	222	3.42	1,734,015,567	26,677,163	Illiquid	Illiquid
USD-NOK__3 months	249	3.83	2,418,847,230	37,213,034	Illiquid	Illiquid
USD-NOK__6 months	78	1.20	535,602,456	8,240,038	Illiquid	Illiquid
USD-NOK__1 year	119	1.83	916,989,181	14,107,526	Illiquid	Illiquid
USD-NOK__2 years	77	1.18	337,512,638	5,192,502	Illiquid	Illiquid
USD-NOK__3 years	8	0.12	923,391	14,206	Illiquid	Illiquid
USD-NZD__<1 week	80	1.23	1,018,759,330	15,673,220	Illiquid	Illiquid
USD-NZD__1 week	481	7.40	3,834,591,817	58,993,720	Illiquid	Illiquid
USD-NZD__1 month	4,068	62.58	12,157,075,508	187,031,931	Illiquid	Illiquid
USD-NZD__3 months	1,512	23.26	13,912,015,604	214,031,009	Illiquid	Illiquid
USD-NZD__6 months	665	10.23	8,488,366,104	130,590,248	Illiquid	Illiquid
USD-NZD__1 year	760	11.69	6,455,220,113	99,311,079	Illiquid	Illiquid
USD-NZD__2 years	239	3.68	2,263,742,304	34,826,805	Illiquid	Illiquid
USD-NZD__3 years	6	0.09	46,698,200	718,434	Illiquid	Illiquid
USD-NZD__4 years	3	0.05	44,185,696	679,780	Illiquid	Illiquid
USD-PEN__1 year	4	0.06	14,684,450	225,915	Illiquid	Illiquid
USD-PEN__2 years	3	0.05	2,286,998	35,185	Illiquid	Illiquid
USD-PEN__3 years	4	0.06	3,919,610	60,302	Illiquid	Illiquid
USD-PEN__4 years	4	0.06	4,899,513	75,377	Illiquid	Illiquid
USD-PEN__5 years	4	0.06	6,369,367	97,990	Illiquid	Illiquid
USD-PEN__6 years	4	0.06	7,839,221	120,603	Illiquid	Illiquid
USD-PEN__7 years	4	0.06	23,027,711	354,272	Illiquid	Illiquid
USD-PHP__1 month	3	0.05	43,548,527	669,977	Illiquid	Illiquid
USD-PHP__3 months	25	0.38	285,432,640	4,391,271	Illiquid	Illiquid
USD-PHP__6 months	22	0.34	289,081,811	4,447,412	Illiquid	Illiquid
USD-PHP__1 year	56	0.86	385,353,613	5,928,517	Illiquid	Illiquid
USD-PHP__2 years	25	0.38	346,783,792	5,335,135	Illiquid	Illiquid
USD-PLN__<1 week	43	0.66	597,549,307	9,193,066	Illiquid	Illiquid
USD-PLN__1 week	19	0.29	205,453,500	3,160,823	Illiquid	Illiquid
USD-PLN__1 month	403	6.20	984,729,540	15,149,685	Illiquid	Illiquid
USD-PLN__3 months	251	3.86	1,184,231,297	18,218,943	Illiquid	Illiquid
USD-PLN__6 months	67	1.03	467,350,512	7,190,008	Illiquid	Illiquid
USD-PLN__1 year	155	2.38	1,526,866,110	23,490,248	Illiquid	Illiquid
USD-PLN__2 years	20	0.31	177,439,893	2,729,845	Illiquid	Illiquid
USD-QAR__<1 week	1	0.02	7,254,985	111,615	Illiquid	Illiquid
USD-QAR__1 year	4	0.06	290,557,911	4,470,122	Illiquid	Illiquid
USD-QAR__2 years	2	0.03	58,143,450	894,515	Illiquid	Illiquid
USD-RON__1 week	2	0.03	257,449	3,961	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-RON_1 month	11	0.17	7,791,822	119,874	Illiquid	Illiquid
USD-RON_3 months	15	0.23	1,231,655	18,949	Illiquid	Illiquid
USD-RON_6 months	18	0.28	9,477,037	145,801	Illiquid	Illiquid
USD-RON_1 year	14	0.22	12,563,478	193,284	Illiquid	Illiquid
USD-RON_2 years	13	0.20	536,441	8,253	Illiquid	Illiquid
USD-RUB_<1 week	231	3.55	3,482,467,473	53,576,423	Illiquid	Illiquid
USD-RUB_1 week	170	2.62	2,881,859,700	44,336,303	Illiquid	Illiquid
USD-RUB_1 month	647	9.95	13,837,386,248	212,882,865	Illiquid	Illiquid
USD-RUB_3 months	980	15.08	19,021,584,090	292,639,755	Illiquid	Illiquid
USD-RUB_6 months	402	6.18	8,198,696,910	126,133,799	Illiquid	Illiquid
USD-RUB_1 year	678	10.43	10,822,739,807	166,503,689	Illiquid	Illiquid
USD-RUB_2 years	313	4.82	8,444,167,100	129,910,263	Illiquid	Illiquid
USD-RUB_3 years	126	1.94	2,061,382,245	31,713,573	Illiquid	Illiquid
USD-RUB_4 years	20	0.31	192,196,947	2,956,876	Illiquid	Illiquid
USD-RUB_5 years	8	0.12	67,460,717	1,037,857	Illiquid	Illiquid
USD-SAR_<1 week	1	0.02	18,132,387	278,960	Illiquid	Illiquid
USD-SAR_1 week	2	0.03	36,261,390	557,868	Illiquid	Illiquid
USD-SAR_1 month	4	0.06	144,933,401	2,229,745	Illiquid	Illiquid
USD-SAR_3 months	9	0.14	486,085,702	7,478,242	Illiquid	Illiquid
USD-SAR_6 months	14	0.22	558,410,853	8,590,936	Illiquid	Illiquid
USD-SAR_1 year	99	1.52	1,763,694,010	27,133,754	Illiquid	Illiquid
USD-SAR_2 years	398	6.12	14,301,672,613	220,025,733	Illiquid	Illiquid
USD-SAR_3 years	145	2.23	5,440,376,240	83,698,096	Illiquid	Illiquid
USD-SAR_4 years	48	0.74	2,817,017,670	43,338,733	Illiquid	Illiquid
USD-SEK_<1 week	10	0.15	276,963,569	4,260,978	Illiquid	Illiquid
USD-SEK_1 week	93	1.43	920,585,005	14,162,846	Illiquid	Illiquid
USD-SEK_1 month	358	5.51	2,293,546,268	35,285,327	Illiquid	Illiquid
USD-SEK_3 months	462	7.11	4,668,882,392	71,828,960	Illiquid	Illiquid
USD-SEK_6 months	415	6.38	6,020,088,910	92,616,752	Illiquid	Illiquid
USD-SEK_1 year	316	4.86	2,850,956,450	43,860,868	Illiquid	Illiquid
USD-SEK_2 years	63	0.97	790,081,640	12,155,102	Illiquid	Illiquid
USD-SEK_3 years	1	0.02	6,963,374	107,129	Illiquid	Illiquid
USD-SEK_4 years	3	0.05	16,317,736	251,042	Illiquid	Illiquid
USD-SGD_<1 week	51	0.78	640,221,096	9,849,555	Illiquid	Illiquid
USD-SGD_1 week	82	1.26	810,623,633	12,471,133	Illiquid	Illiquid
USD-SGD_1 month	556	8.55	6,250,082,001	96,155,108	Illiquid	Illiquid
USD-SGD_3 months	489	7.52	13,360,257,479	205,542,423	Illiquid	Illiquid
USD-SGD_6 months	160	2.46	3,310,713,041	50,934,047	Illiquid	Illiquid
USD-SGD_1 year	263	4.05	6,695,541,015	103,008,323	Illiquid	Illiquid
USD-SGD_2 years	136	2.09	2,578,235,695	39,665,165	Illiquid	Illiquid
USD-SGD_3 years	21	0.32	386,102,555	5,940,039	Illiquid	Illiquid
USD-SGD_4 years	7	0.11	145,046,544	2,231,485	Illiquid	Illiquid
USD-SGD_5 years	3	0.05	65,270,945	1,004,168	Illiquid	Illiquid
USD-SGD_6 years	3	0.05	90,654,090	1,394,678	Illiquid	Illiquid
USD-THB_1 month	5	0.08	161,844,793	2,489,920	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-THB_3 months	14	0.22	187,107,052	2,878,570	Illiquid	Illiquid
USD-THB_6 months	9	0.14	7,520,663	115,703	Illiquid	Illiquid
USD-THB_1 year	11	0.17	2,627,793	40,428	Illiquid	Illiquid
USD-THB_2 years	4	0.06	7,252,327	111,574	Illiquid	Illiquid
USD-TRY_<1 week	334	5.14	3,405,403,799	52,390,828	Illiquid	Illiquid
USD-TRY_1 week	1,486	22.86	4,466,478,181	68,715,049	Illiquid	Illiquid
USD-TRY_1 month	2,380	36.62	21,103,592,943	324,670,661	Illiquid	Illiquid
USD-TRY_3 months	1,587	24.42	23,862,774,708	367,119,611	Illiquid	Illiquid
USD-TRY_6 months	569	8.75	10,670,173,596	164,156,517	Illiquid	Illiquid
USD-TRY_1 year	621	9.55	7,846,400,040	120,713,847	Illiquid	Illiquid
USD-TRY_2 years	323	4.97	4,539,498,107	69,838,432	Illiquid	Illiquid
USD-TRY_3 years	21	0.32	719,388,942	11,067,522	Illiquid	Illiquid
USD-TRY_4 years	2	0.03	21,756,982	334,723	Illiquid	Illiquid
USD-TWD_1 week	1	0.02	10,873,033	167,277	Illiquid	Illiquid
USD-TWD_1 month	35	0.54	358,927,549	5,521,962	Illiquid	Illiquid
USD-TWD_3 months	98	1.51	790,017,228	12,154,111	Illiquid	Illiquid
USD-TWD_6 months	310	4.77	1,708,127,475	26,278,884	Illiquid	Illiquid
USD-TWD_1 year	1,003	15.43	1,530,295,876	23,543,013	Illiquid	Illiquid
USD-TWD_2 years	35	0.54	376,438,142	5,791,356	Illiquid	Illiquid
USD-TWD_3 years	2	0.03	39,887,799	613,658	Illiquid	Illiquid
USD-TWD_5 years	1	0.02	4,351,396	66,945	Illiquid	Illiquid
USD-TWD_6 years	1	0.02	18,130,818	278,936	Illiquid	Illiquid
USD-XAU_<1 week	35	0.54	40,602,305	624,651	Illiquid	Illiquid
USD-XAU_1 week	110	1.69	139,076,917	2,139,645	Illiquid	Illiquid
USD-XAU_1 month	460	7.08	397,789,393	6,119,837	Illiquid	Illiquid
USD-XAU_3 months	451	6.94	618,163,402	9,510,206	Illiquid	Illiquid
USD-XAU_6 months	89	1.37	288,041,384	4,431,406	Illiquid	Illiquid
USD-XAU_1 year	46	0.71	336,044,805	5,169,920	Illiquid	Illiquid
USD-XAU_2 years	42	0.65	319,493,306	4,915,282	Illiquid	Illiquid
USD-XAU_3 years	17	0.26	333,903,405	5,136,975	Illiquid	Illiquid
USD-XAU_4 years	4	0.06	47,356,937	728,568	Illiquid	Illiquid
USD-ZAR_<1 week	113	1.74	1,078,147,156	16,586,879	Illiquid	Illiquid
USD-ZAR_1 week	203	3.12	2,097,415,134	32,267,925	Illiquid	Illiquid
USD-ZAR_1 month	1,185	18.23	8,775,928,966	135,014,292	Illiquid	Illiquid
USD-ZAR_3 months	695	10.69	8,200,790,410	126,166,006	Illiquid	Illiquid
USD-ZAR_6 months	275	4.23	3,698,154,205	56,894,680	Illiquid	Illiquid
USD-ZAR_1 year	208	3.20	2,095,205,516	32,233,931	Illiquid	Illiquid
USD-ZAR_2 years	134	2.06	2,121,176,211	32,633,480	Illiquid	Illiquid
USD-ZAR_3 years	56	0.86	1,558,410,026	23,975,539	Illiquid	Illiquid
USD-ZAR_4 years	22	0.34	564,506,576	8,684,717	Illiquid	Illiquid
USD-ZAR_5 years	2	0.03	4,877,322	75,036	Illiquid	Illiquid
USD-ZAR_6 years	1	0.02	2,519,761	38,766	Illiquid	Illiquid
USD-ZAR_8 years	4	0.06	60,176,890	925,798	Illiquid	Illiquid
ZAR-DKK_1 month	1	0.02	823,003	12,662	Illiquid	Illiquid
ZAR-DKK_3 months	5	0.08	2,802,201	43,111	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					500,000,000	
Num of trades per day					10.00	
FX OPTIONS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
ZAR-DKK 6 months	2	0.03	2,057,508	31,654	Illiquid	Illiquid
ZAR-SEK 6 months	1	0.02	1,714,590	26,378	Illiquid	Illiquid

Table 5: FX options - liquidity assessment

FX Swaps

13. The class of FX swaps was divided into more granular sub-classes on the basis of the two following criteria:
 - i. the underlying currency pair;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. The same approach used for forwards was applied to define the tenor buckets.

14. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the “Liquidity Flag” is based, are indicated. However, as stated above the classification of a sub-class as liquid was confirmed only if concentration of liquidity across tenors was present. In other words, if for a currency pair only one tenor was liquid it was deemed to be illiquid. The final classification of the sub-class as liquid is provided in the field “Final Liquidity Flag”. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered¹².

¹² Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AED-BHD_1 week	1	0.02	187,336	2,882	Illiquid	Illiquid
AED-CZK_1 week	1	0.02	513	8	Illiquid	Illiquid
AED-DKK_<1 week	4	0.06	7,906,076	121,632	Illiquid	Illiquid
AED-DKK_1 week	5	0.08	17,955	276	Illiquid	Illiquid
AED-DKK_1 month	1	0.02	3,948,957	60,753	Illiquid	Illiquid
AED-DKK_6 months	1	0.02	1,974,479	30,377	Illiquid	Illiquid
AED-HKD_<1 week	1	0.02	674	10	Illiquid	Illiquid
AED-INR_1 year	1	0.02	4,416,577	67,947	Illiquid	Illiquid
AED-NOK_<1 week	2	0.03	73,857	1,136	Illiquid	Illiquid
AED-NOK_1 week	5	0.08	11,848	182	Illiquid	Illiquid
AED-NOK_1 month	2	0.03	615,444	9,468	Illiquid	Illiquid
AED-NOK_3 months	1	0.02	59,234	911	Illiquid	Illiquid
AED-NZD_<1 week	1	0.02	460,527	7,085	Illiquid	Illiquid
AED-NZD_1 month	1	0.02	460,527	7,085	Illiquid	Illiquid
AED-OMR_<1 week	1	0.02	6,404	99	Illiquid	Illiquid
AED-OMR_1 week	5	0.08	1,040,889	16,014	Illiquid	Illiquid
AED-RUB_1 week	2	0.03	4,950	76	Illiquid	Illiquid
AED-SEK_<1 week	50	0.77	38,625,131	594,233	Illiquid	Illiquid
AED-SEK_1 week	18	0.28	7,221,007	111,092	Illiquid	Illiquid
AED-SEK_1 month	15	0.23	9,095,773	139,935	Illiquid	Illiquid
AED-SEK_3 months	1	0.02	63,183	972	Illiquid	Illiquid
AED-SEK_6 months	3	0.05	285,602	4,394	Illiquid	Illiquid
AED-THB_<1 week	1	0.02	508	8	Illiquid	Illiquid
AED-ZAR_<1 week	4	0.06	31,308	482	Illiquid	Illiquid
AED-ZAR_1 week	5	0.08	29,908	460	Illiquid	Illiquid
AUD-AED_<1 week	8	0.12	269,755	4,150	Illiquid	Illiquid
AUD-AED_1 week	6	0.09	1,182,685	18,195	Illiquid	Illiquid
AUD-AED_1 month	3	0.05	518,474	7,977	Illiquid	Illiquid
AUD-CAD_<1 week	966	14.86	6,168,543,568	94,900,670	Illiquid	Illiquid
AUD-CAD_1 week	172	2.65	260,211,111	4,003,248	Illiquid	Illiquid
AUD-CAD_1 month	217	3.34	1,155,386,819	17,775,182	Illiquid	Illiquid
AUD-CAD_3 months	47	0.72	77,691,229	1,195,250	Illiquid	Illiquid
AUD-CAD_6 months	64	0.98	217,518,044	3,346,431	Illiquid	Illiquid
AUD-CAD_1 year	4	0.06	17,998,328	276,897	Illiquid	Illiquid
AUD-CAD_2 years	1	0.02	40,171	618	Illiquid	Illiquid
AUD-CHF_<1 week	743	11.43	2,838,656,160	43,671,633	Illiquid	Illiquid
AUD-CHF_1 week	115	1.77	333,216,626	5,126,410	Illiquid	Illiquid
AUD-CHF_1 month	138	2.12	656,473,997	10,099,600	Illiquid	Illiquid
AUD-CHF_3 months	35	0.54	226,448,666	3,483,826	Illiquid	Illiquid
AUD-CHF_6 months	41	0.63	324,720,843	4,995,705	Illiquid	Illiquid
AUD-CHF_1 year	8	0.12	44,423,831	683,444	Illiquid	Illiquid
AUD-CNY_<1 week	4	0.06	15,365,153	236,387	Illiquid	Illiquid
AUD-CNY_1 week	3	0.05	90,016	1,385	Illiquid	Illiquid
AUD-CNY_1 month	5	0.08	20,338,855	312,905	Illiquid	Illiquid
AUD-CNY_6 months	1	0.02	44,245	681	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-CZK__1 week	2	0.03	1,982,609	30,502	Illiquid	Illiquid
AUD-CZK__6 months	1	0.02	1,908,077	29,355	Illiquid	Illiquid
AUD-CZK__1 year	2	0.03	1,098,003	16,892	Illiquid	Illiquid
AUD-DKK__<1 week	42	0.65	149,033,649	2,292,825	Illiquid	Illiquid
AUD-DKK__1 week	20	0.31	52,466,531	807,177	Illiquid	Illiquid
AUD-DKK__1 month	21	0.32	16,292,268	250,650	Illiquid	Illiquid
AUD-DKK__3 months	21	0.32	2,735,399	42,083	Illiquid	Illiquid
AUD-DKK__6 months	5	0.08	72,106,362	1,109,329	Illiquid	Illiquid
AUD-DKK__1 year	4	0.06	4,793,720	73,750	Illiquid	Illiquid
AUD-HKD__<1 week	58	0.89	805,515,940	12,392,553	Illiquid	Illiquid
AUD-HKD__1 week	29	0.45	5,554,156	85,449	Illiquid	Illiquid
AUD-HKD__1 month	65	1.00	16,675,721	256,550	Illiquid	Illiquid
AUD-HKD__3 months	6	0.09	8,496,825	130,720	Illiquid	Illiquid
AUD-HKD__6 months	10	0.15	7,930,712	122,011	Illiquid	Illiquid
AUD-HKD__1 year	2	0.03	453,522	6,977	Illiquid	Illiquid
AUD-HKD__2 years	6	0.09	1,955,655	30,087	Illiquid	Illiquid
AUD-HUF__<1 week	5	0.08	75,089	1,155	Illiquid	Illiquid
AUD-HUF__1 week	2	0.03	922,622	14,194	Illiquid	Illiquid
AUD-HUF__3 months	2	0.03	845,211	13,003	Illiquid	Illiquid
AUD-HUF__6 months	3	0.05	4,006,438	61,638	Illiquid	Illiquid
AUD-HUF__1 year	1	0.02	346,662	5,333	Illiquid	Illiquid
AUD-ILS__<1 week	4	0.06	506,410	7,791	Illiquid	Illiquid
AUD-ILS__1 month	2	0.03	2,011,532	30,947	Illiquid	Illiquid
AUD-ILS__3 months	2	0.03	477,538	7,347	Illiquid	Illiquid
AUD-ILS__6 months	2	0.03	2,011,532	30,947	Illiquid	Illiquid
AUD-INR__<1 week	7	0.11	475,186	7,311	Illiquid	Illiquid
AUD-INR__1 week	4	0.06	36,970	569	Illiquid	Illiquid
AUD-INR__1 month	4	0.06	140,068	2,155	Illiquid	Illiquid
AUD-INR__3 months	2	0.03	267,806	4,120	Illiquid	Illiquid
AUD-INR__6 months	5	0.08	301,281	4,635	Illiquid	Illiquid
AUD-JPY__<1 week	2,110	32.46	24,664,248,962	379,449,984	Liquid	Illiquid
AUD-JPY__1 week	806	12.40	6,126,823,764	94,258,827	Illiquid	Illiquid
AUD-JPY__1 month	1,011	15.55	2,774,811,036	42,689,401	Illiquid	Illiquid
AUD-JPY__3 months	828	12.74	2,107,721,468	32,426,484	Illiquid	Illiquid
AUD-JPY__6 months	239	3.68	1,217,240,126	18,726,771	Illiquid	Illiquid
AUD-JPY__1 year	9	0.14	48,900,800	752,320	Illiquid	Illiquid
AUD-JPY__2 years	2	0.03	16,084,183	247,449	Illiquid	Illiquid
AUD-JPY__3 years	2	0.03	900,139	13,848	Illiquid	Illiquid
AUD-JPY__5 years	1	0.02	2,008,542	30,901	Illiquid	Illiquid
AUD-JPY__8 years	1	0.02	1,740,736	26,781	Illiquid	Illiquid
AUD-JPY__16 years	2	0.03	7,677,503	118,115	Illiquid	Illiquid
AUD-JPY__10 years	3	0.05	18,103,656	278,518	Illiquid	Illiquid
AUD-JPY__11 years	2	0.03	6,226,186	95,787	Illiquid	Illiquid
AUD-JPY__13 years	1	0.02	11,910,652	183,241	Illiquid	Illiquid
AUD-JPY__14 years	1	0.02	1,800,992	27,708	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-JPY__15 years	1	0.02	5,610,526	86,316	Illiquid	Illiquid
AUD-JPY__21 years	2	0.03	14,190,739	218,319	Illiquid	Illiquid
AUD-JPY__27 years	1	0.02	22,629,570	348,147	Illiquid	Illiquid
AUD-JPY__28 years	1	0.02	16,262,493	250,192	Illiquid	Illiquid
AUD-JPY__9 years	4	0.06	24,316,011	374,092	Illiquid	Illiquid
AUD-KES__<1 week	6	0.09	18,136	279	Illiquid	Illiquid
AUD-KRW__<1 week	2	0.03	74,048,237	1,139,204	Illiquid	Illiquid
AUD-MXN__<1 week	8	0.12	4,850,456	74,622	Illiquid	Illiquid
AUD-MXN__1 week	2	0.03	3,621,489	55,715	Illiquid	Illiquid
AUD-MXN__1 month	19	0.29	97,631,264	1,502,019	Illiquid	Illiquid
AUD-MXN__3 months	9	0.14	11,092,216	170,649	Illiquid	Illiquid
AUD-MXN__6 months	22	0.34	23,348,072	359,201	Illiquid	Illiquid
AUD-NOK__<1 week	29	0.45	30,936,074	475,940	Illiquid	Illiquid
AUD-NOK__1 week	14	0.22	3,988,369	61,360	Illiquid	Illiquid
AUD-NOK__1 month	17	0.26	41,247,506	634,577	Illiquid	Illiquid
AUD-NOK__3 months	22	0.34	73,437,990	1,129,815	Illiquid	Illiquid
AUD-NOK__6 months	11	0.17	27,052,132	416,187	Illiquid	Illiquid
AUD-NOK__1 year	5	0.08	3,347,570	51,501	Illiquid	Illiquid
AUD-NOK__2 years	2	0.03	856,594	13,178	Illiquid	Illiquid
AUD-NZD__<1 week	2,341	36.02	2,539,198,934	39,064,599	Illiquid	Illiquid
AUD-NZD__1 week	2,653	40.82	1,014,866,055	15,613,324	Illiquid	Illiquid
AUD-NZD__1 month	852	13.11	1,700,777,050	26,165,801	Illiquid	Illiquid
AUD-NZD__3 months	487	7.49	890,469,305	13,699,528	Illiquid	Illiquid
AUD-NZD__6 months	180	2.77	345,766,884	5,319,491	Illiquid	Illiquid
AUD-NZD__1 year	3	0.05	5,676,373	87,329	Illiquid	Illiquid
AUD-NZD__2 years	4	0.06	3,143,503	48,362	Illiquid	Illiquid
AUD-PLN__<1 week	4	0.06	181,933	2,799	Illiquid	Illiquid
AUD-PLN__1 week	3	0.05	1,673,981	25,754	Illiquid	Illiquid
AUD-PLN__1 month	1	0.02	95,510	1,469	Illiquid	Illiquid
AUD-PLN__3 months	2	0.03	1,622,864	24,967	Illiquid	Illiquid
AUD-PLN__6 months	2	0.03	4,070,594	62,625	Illiquid	Illiquid
AUD-QAR__1 year	1	0.02	111,015	1,708	Illiquid	Illiquid
AUD-RUB__<1 week	1	0.02	917	14	Illiquid	Illiquid
AUD-RUB__1 week	1	0.02	2,620	40	Illiquid	Illiquid
AUD-SAR__1 month	1	0.02	1,674	26	Illiquid	Illiquid
AUD-SEK__<1 week	145	2.23	853,456,648	13,130,102	Illiquid	Illiquid
AUD-SEK__1 week	41	0.63	22,303,440	343,130	Illiquid	Illiquid
AUD-SEK__1 month	76	1.17	524,682,570	8,072,040	Illiquid	Illiquid
AUD-SEK__3 months	57	0.88	337,456,178	5,191,634	Illiquid	Illiquid
AUD-SEK__6 months	26	0.40	246,790,351	3,796,775	Illiquid	Illiquid
AUD-SEK__1 year	7	0.11	7,572,892	116,506	Illiquid	Illiquid
AUD-SEK__2 years	2	0.03	934,611	14,379	Illiquid	Illiquid
AUD-SGD__<1 week	79	1.22	389,318,140	5,989,510	Illiquid	Illiquid
AUD-SGD__1 week	42	0.65	34,224,051	526,524	Illiquid	Illiquid
AUD-SGD__1 month	53	0.82	203,928,459	3,137,361	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
AUD-SGD__3 months	25	0.38	132,981,192	2,045,864	Illiquid	Illiquid
AUD-SGD__6 months	10	0.15	62,383,237	959,742	Illiquid	Illiquid
AUD-SGD__1 year	5	0.08	9,152,925	140,814	Illiquid	Illiquid
AUD-THB__<1 week	6	0.09	409,469	6,300	Illiquid	Illiquid
AUD-THB__1 week	7	0.11	126,090	1,940	Illiquid	Illiquid
AUD-THB__1 month	45	0.69	1,640,680	25,241	Illiquid	Illiquid
AUD-THB__3 months	5	0.08	403,251	6,204	Illiquid	Illiquid
AUD-THB__6 months	2	0.03	2,728,420	41,976	Illiquid	Illiquid
AUD-THB__1 year	1	0.02	132,638	2,041	Illiquid	Illiquid
AUD-TRY__<1 week	1	0.02	9,793	151	Illiquid	Illiquid
AUD-TRY__1 week	2	0.03	25,215	388	Illiquid	Illiquid
AUD-TRY__1 month	1	0.02	103,754	1,596	Illiquid	Illiquid
AUD-TRY__6 months	1	0.02	2,277,060	35,032	Illiquid	Illiquid
AUD-TWD__3 months	2	0.03	1,227,386	18,883	Illiquid	Illiquid
AUD-USD__<1 week	13,062	200.95	413,858,846,746	6,367,059,181	Liquid	Liquid
AUD-USD__1 week	3,661	56.32	31,202,476,067	480,038,093	Liquid	Liquid
AUD-USD__1 month	6,328	97.35	44,082,178,577	678,187,363	Liquid	Liquid
AUD-USD__3 months	5,560	85.54	30,815,099,783	474,078,458	Liquid	Liquid
AUD-USD__6 months	6,134	94.37	19,647,761,576	302,273,255	Liquid	Liquid
AUD-USD__1 year	257	3.95	1,344,416,045	20,683,324	Illiquid	Illiquid
AUD-USD__2 years	102	1.57	947,584,770	14,578,227	Illiquid	Illiquid
AUD-USD__3 years	7	0.11	4,592,720	70,657	Illiquid	Illiquid
AUD-USD__4 years	4	0.06	22,912,979	352,507	Illiquid	Illiquid
AUD-USD__5 years	2	0.03	1,205,125	18,540	Illiquid	Illiquid
AUD-USD__10 years	2	0.03	15,800,528	243,085	Illiquid	Illiquid
AUD-XAU__1 month	1	0.02	2,097,882	32,275	Illiquid	Illiquid
AUD-ZAR__<1 week	20	0.31	279,902,732	4,306,196	Illiquid	Illiquid
AUD-ZAR__1 week	29	0.45	14,111,657	217,102	Illiquid	Illiquid
AUD-ZAR__1 month	25	0.38	6,778,840	104,290	Illiquid	Illiquid
AUD-ZAR__3 months	1	0.02	143,671	2,210	Illiquid	Illiquid
AUD-ZAR__6 months	6	0.09	9,035,661	139,010	Illiquid	Illiquid
AUD-ZAR__1 year	1	0.02	175,277	2,697	Illiquid	Illiquid
BHD-KWD__<1 week	1	0.02	1,771	27	Illiquid	Illiquid
BHD-KWD__1 week	1	0.02	1,733	27	Illiquid	Illiquid
BHD-SEK__<1 week	1	0.02	984	15	Illiquid	Illiquid
BHD-ZAR__<1 week	1	0.02	719	11	Illiquid	Illiquid
BND-SGD__<1 week	4	0.06	3,746,631	57,640	Illiquid	Illiquid
BND-SGD__1 week	2	0.03	63,420,540	975,701	Illiquid	Illiquid
BND-SGD__1 month	4	0.06	3,746,658	57,641	Illiquid	Illiquid
BWP-SEK__1 month	1	0.02	992,240	15,265	Illiquid	Illiquid
BWP-SEK__3 months	1	0.02	1,017,046	15,647	Illiquid	Illiquid
BWP-ZAR__3 months	2	0.03	1,653,733	25,442	Illiquid	Illiquid
CAD-AED__1 month	1	0.02	69,107	1,063	Illiquid	Illiquid
CAD-AED__6 months	1	0.02	801,638	12,333	Illiquid	Illiquid
CAD-CHF__<1 week	548	8.43	9,333,536,625	143,592,871	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CAD-CHF__1 week	109	1.68	388,874,511	5,982,685	Illiquid	Illiquid
CAD-CHF__1 month	95	1.46	506,775,081	7,796,540	Illiquid	Illiquid
CAD-CHF__3 months	61	0.94	397,633,957	6,117,445	Illiquid	Illiquid
CAD-CHF__6 months	14	0.22	384,130,275	5,909,697	Illiquid	Illiquid
CAD-CHF__1 year	5	0.08	41,862,713	644,042	Illiquid	Illiquid
CAD-CHF__2 years	2	0.03	2,245,371	34,544	Illiquid	Illiquid
CAD-CNY__<1 week	3	0.05	719,187	11,064	Illiquid	Illiquid
CAD-CNY__1 week	2	0.03	74,912	1,152	Illiquid	Illiquid
CAD-CNY__3 months	3	0.05	443,733	6,827	Illiquid	Illiquid
CAD-CNY__6 months	3	0.05	828,432	12,745	Illiquid	Illiquid
CAD-CNY__2 years	2	0.03	1,073,713	16,519	Illiquid	Illiquid
CAD-CZK__1 week	5	0.08	73,497	1,131	Illiquid	Illiquid
CAD-DKK__<1 week	18	0.28	1,303,899,208	20,059,988	Illiquid	Illiquid
CAD-DKK__1 week	23	0.35	978,540,359	15,054,467	Illiquid	Illiquid
CAD-DKK__1 month	16	0.25	1,000,677,037	15,395,031	Illiquid	Illiquid
CAD-DKK__3 months	7	0.11	31,136,139	479,018	Illiquid	Illiquid
CAD-DKK__6 months	3	0.05	30,940,374	476,006	Illiquid	Illiquid
CAD-DKK__1 year	2	0.03	1,287,714	19,811	Illiquid	Illiquid
CAD-HKD__<1 week	10	0.15	2,033,707	31,288	Illiquid	Illiquid
CAD-HKD__1 week	6	0.09	197,333	3,036	Illiquid	Illiquid
CAD-HKD__1 month	11	0.17	26,716,210	411,019	Illiquid	Illiquid
CAD-HKD__3 months	9	0.14	11,945,184	183,772	Illiquid	Illiquid
CAD-HKD__6 months	6	0.09	4,495,547	69,162	Illiquid	Illiquid
CAD-HKD__1 year	1	0.02	1,248,528	19,208	Illiquid	Illiquid
CAD-HUF__1 week	2	0.03	4,931,951	75,876	Illiquid	Illiquid
CAD-HUF__1 month	5	0.08	1,304,180	20,064	Illiquid	Illiquid
CAD-HUF__3 months	2	0.03	4,889,383	75,221	Illiquid	Illiquid
CAD-HUF__6 months	1	0.02	227,185	3,495	Illiquid	Illiquid
CAD-ILS__<1 week	7	0.11	559,392,248	8,606,035	Illiquid	Illiquid
CAD-ILS__1 week	2	0.03	44,077	678	Illiquid	Illiquid
CAD-ILS__1 month	4	0.06	468,163	7,203	Illiquid	Illiquid
CAD-ILS__3 months	2	0.03	464,354	7,144	Illiquid	Illiquid
CAD-ILS__6 months	2	0.03	454,685	6,995	Illiquid	Illiquid
CAD-ILS__2 years	1	0.02	104,390	1,606	Illiquid	Illiquid
CAD-INR__<1 week	2	0.03	3,809	59	Illiquid	Illiquid
CAD-INR__1 week	1	0.02	7,503	115	Illiquid	Illiquid
CAD-INR__1 month	2	0.03	2,882	44	Illiquid	Illiquid
CAD-JPY__<1 week	997	15.34	4,786,449,525	73,637,685	Illiquid	Illiquid
CAD-JPY__1 week	295	4.54	975,834,907	15,012,845	Illiquid	Illiquid
CAD-JPY__1 month	257	3.95	884,006,734	13,600,104	Illiquid	Illiquid
CAD-JPY__3 months	128	1.97	342,880,715	5,275,088	Illiquid	Illiquid
CAD-JPY__6 months	113	1.74	693,878,503	10,675,054	Illiquid	Illiquid
CAD-JPY__1 year	3	0.05	17,364,610	267,148	Illiquid	Illiquid
CAD-JPY__2 years	1	0.02	1,978,749	30,442	Illiquid	Illiquid
CAD-KRW__<1 week	1	0.02	36,606,850	563,182	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CAD-KRW_3 months	3	0.05	32,979,144	507,371	Illiquid	Illiquid
CAD-MXN_<1 week	95	1.46	284,644,114	4,379,140	Illiquid	Illiquid
CAD-MXN_1 week	30	0.46	31,363,246	482,511	Illiquid	Illiquid
CAD-MXN_1 month	80	1.23	371,065,316	5,708,697	Illiquid	Illiquid
CAD-MXN_3 months	30	0.46	180,094,068	2,770,678	Illiquid	Illiquid
CAD-MXN_6 months	3	0.05	792,345	12,190	Illiquid	Illiquid
CAD-MXN_1 year	3	0.05	83,981	1,292	Illiquid	Illiquid
CAD-MXN_2 years	3	0.05	2,212,652	34,041	Illiquid	Illiquid
CAD-NOK_<1 week	26	0.40	316,633,602	4,871,286	Illiquid	Illiquid
CAD-NOK_1 week	8	0.12	7,947,162	122,264	Illiquid	Illiquid
CAD-NOK_1 month	26	0.40	92,902,891	1,429,275	Illiquid	Illiquid
CAD-NOK_3 months	40	0.62	546,594,906	8,409,152	Illiquid	Illiquid
CAD-NOK_6 months	22	0.34	134,621,931	2,071,107	Illiquid	Illiquid
CAD-NOK_1 year	1	0.02	154,342	2,374	Illiquid	Illiquid
CAD-NOK_2 years	1	0.02	69,323	1,067	Illiquid	Illiquid
CAD-NZD_<1 week	576	8.86	1,706,384,003	26,252,062	Illiquid	Illiquid
CAD-NZD_1 week	326	5.02	94,247,600	1,449,963	Illiquid	Illiquid
CAD-NZD_1 month	55	0.85	174,315,335	2,681,774	Illiquid	Illiquid
CAD-NZD_3 months	16	0.25	59,936,173	922,095	Illiquid	Illiquid
CAD-NZD_6 months	10	0.15	33,119,824	509,536	Illiquid	Illiquid
CAD-PLN_<1 week	7	0.11	21,703,455	333,899	Illiquid	Illiquid
CAD-PLN_1 week	10	0.15	19,743,568	303,747	Illiquid	Illiquid
CAD-PLN_1 month	3	0.05	87,330	1,344	Illiquid	Illiquid
CAD-PLN_3 months	3	0.05	13,406,802	206,258	Illiquid	Illiquid
CAD-PLN_6 months	1	0.02	456,777	7,027	Illiquid	Illiquid
CAD-QAR_3 months	1	0.02	96,299	1,482	Illiquid	Illiquid
CAD-QAR_6 months	1	0.02	166,215	2,557	Illiquid	Illiquid
CAD-RUB_3 months	1	0.02	94,970	1,461	Illiquid	Illiquid
CAD-SAR_1 week	1	0.02	316,600	4,871	Illiquid	Illiquid
CAD-SAR_6 months	1	0.02	1,207,037	18,570	Illiquid	Illiquid
CAD-SEK_<1 week	152	2.34	958,690,007	14,749,077	Illiquid	Illiquid
CAD-SEK_1 week	30	0.46	76,858,148	1,182,433	Illiquid	Illiquid
CAD-SEK_1 month	58	0.89	188,814,197	2,904,834	Illiquid	Illiquid
CAD-SEK_3 months	56	0.86	439,249,585	6,757,686	Illiquid	Illiquid
CAD-SEK_6 months	24	0.37	317,610,212	4,886,311	Illiquid	Illiquid
CAD-SEK_1 year	5	0.08	32,823,710	504,980	Illiquid	Illiquid
CAD-SEK_2 years	1	0.02	1,306,634	20,102	Illiquid	Illiquid
CAD-SEK_4 years	3	0.05	25,637,987	394,431	Illiquid	Illiquid
CAD-SGD_<1 week	16	0.25	139,216,872	2,141,798	Illiquid	Illiquid
CAD-SGD_1 week	17	0.26	3,508,678	53,980	Illiquid	Illiquid
CAD-SGD_1 month	7	0.11	66,452,184	1,022,341	Illiquid	Illiquid
CAD-SGD_3 months	8	0.12	26,731,228	411,250	Illiquid	Illiquid
CAD-SGD_6 months	5	0.08	44,951,860	691,567	Illiquid	Illiquid
CAD-SGD_1 year	1	0.02	5,936	91	Illiquid	Illiquid
CAD-THB_<1 week	1	0.02	54,278	835	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CAD-THB_1 week	1	0.02	274,830	4,228	Illiquid	Illiquid
CAD-THB_1 month	3	0.05	2,007,680	30,887	Illiquid	Illiquid
CAD-THB_3 months	4	0.06	1,694,657	26,072	Illiquid	Illiquid
CAD-TRY_<1 week	37	0.57	4,237,376	65,190	Illiquid	Illiquid
CAD-TRY_1 week	2	0.03	3,827,786	58,889	Illiquid	Illiquid
CAD-TRY_3 months	3	0.05	5,114,318	78,682	Illiquid	Illiquid
CAD-ZAR_<1 week	5	0.08	5,777,058	88,878	Illiquid	Illiquid
CAD-ZAR_1 week	32	0.49	15,156,575	233,178	Illiquid	Illiquid
CAD-ZAR_1 month	28	0.43	2,003,935	30,830	Illiquid	Illiquid
CAD-ZAR_3 months	3	0.05	1,756,563	27,024	Illiquid	Illiquid
CAD-ZAR_6 months	4	0.06	47,237,773	726,735	Illiquid	Illiquid
CAD-ZAR_1 year	1	0.02	1,098,602	16,902	Illiquid	Illiquid
CHF-AED_<1 week	5	0.08	2,560,814	39,397	Illiquid	Illiquid
CHF-AED_1 week	5	0.08	10,555	162	Illiquid	Illiquid
CHF-AED_1 month	1	0.02	33,656	518	Illiquid	Illiquid
CHF-AED_3 months	2	0.03	1,179,891	18,152	Illiquid	Illiquid
CHF-AED_6 months	1	0.02	1,243,892	19,137	Illiquid	Illiquid
CHF-AED_2 years	1	0.02	14,808,589	227,824	Illiquid	Illiquid
CHF-CNY_<1 week	7	0.11	61,194,018	941,446	Illiquid	Illiquid
CHF-CNY_1 month	5	0.08	13,018,348	200,282	Illiquid	Illiquid
CHF-CNY_3 months	9	0.14	6,892,565	106,039	Illiquid	Illiquid
CHF-CNY_6 months	4	0.06	176,767	2,719	Illiquid	Illiquid
CHF-CNY_1 year	2	0.03	15,251,426	234,637	Illiquid	Illiquid
CHF-CZK_<1 week	13	0.20	18,316,441	281,791	Illiquid	Illiquid
CHF-CZK_1 week	15	0.23	1,154,810	17,766	Illiquid	Illiquid
CHF-CZK_1 month	10	0.15	90,641,176	1,394,480	Illiquid	Illiquid
CHF-CZK_3 months	4	0.06	10,216,884	157,183	Illiquid	Illiquid
CHF-CZK_6 months	3	0.05	5,777,356	88,882	Illiquid	Illiquid
CHF-CZK_1 year	1	0.02	2,460,998	37,862	Illiquid	Illiquid
CHF-DKK_<1 week	90	1.38	243,178,058	3,741,201	Illiquid	Illiquid
CHF-DKK_1 week	36	0.55	109,950,752	1,691,550	Illiquid	Illiquid
CHF-DKK_1 month	29	0.45	125,057,046	1,923,955	Illiquid	Illiquid
CHF-DKK_3 months	43	0.66	31,584,410	485,914	Illiquid	Illiquid
CHF-DKK_6 months	28	0.43	176,519,877	2,715,690	Illiquid	Illiquid
CHF-DKK_1 year	8	0.12	39,938,170	614,433	Illiquid	Illiquid
CHF-DKK_2 years	1	0.02	114,847	1,767	Illiquid	Illiquid
CHF-HKD_<1 week	27	0.42	1,204,114,810	18,524,843	Illiquid	Illiquid
CHF-HKD_1 week	15	0.23	45,480,931	699,707	Illiquid	Illiquid
CHF-HKD_1 month	36	0.55	235,662,465	3,625,576	Illiquid	Illiquid
CHF-HKD_3 months	20	0.31	39,637,206	609,803	Illiquid	Illiquid
CHF-HKD_6 months	5	0.08	11,092,180	170,649	Illiquid	Illiquid
CHF-HKD_1 year	2	0.03	30,107,616	463,194	Illiquid	Illiquid
CHF-HKD_2 years	1	0.02	41,679,746	641,227	Illiquid	Illiquid
CHF-HRK_6 months	2	0.03	602,161	9,264	Illiquid	Illiquid
CHF-HRK_1 year	2	0.03	1,704,585	26,224	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-HUF_<1 week	46	0.71	48,120,124	740,310	Illiquid	Illiquid
CHF-HUF_1 week	4	0.06	11,330,762	174,319	Illiquid	Illiquid
CHF-HUF_1 month	15	0.23	120,446,020	1,853,016	Illiquid	Illiquid
CHF-HUF_3 months	12	0.18	59,729,297	918,912	Illiquid	Illiquid
CHF-HUF_6 months	3	0.05	9,551,398	146,945	Illiquid	Illiquid
CHF-HUF_1 year	4	0.06	6,789,665	104,456	Illiquid	Illiquid
CHF-ILS_<1 week	1	0.02	103,405	1,591	Illiquid	Illiquid
CHF-ILS_1 week	2	0.03	5,042	78	Illiquid	Illiquid
CHF-ILS_1 month	2	0.03	103,842	1,598	Illiquid	Illiquid
CHF-ILS_3 months	5	0.08	1,589,218	24,450	Illiquid	Illiquid
CHF-INR_<1 week	4	0.06	185,925	2,860	Illiquid	Illiquid
CHF-INR_1 week	1	0.02	3,556	55	Illiquid	Illiquid
CHF-INR_1 month	2	0.03	50,491	777	Illiquid	Illiquid
CHF-INR_3 months	5	0.08	145,953	2,245	Illiquid	Illiquid
CHF-JPY_<1 week	918	14.12	8,911,828,261	137,105,050	Illiquid	Illiquid
CHF-JPY_1 week	255	3.92	1,111,000,552	17,092,316	Illiquid	Illiquid
CHF-JPY_1 month	228	3.51	1,385,890,227	21,321,388	Illiquid	Illiquid
CHF-JPY_3 months	90	1.38	27,217,124,867	418,724,998	Illiquid	Illiquid
CHF-JPY_6 months	113	1.74	288,615,221	4,440,234	Illiquid	Illiquid
CHF-JPY_1 year	10	0.15	25,835,368	397,467	Illiquid	Illiquid
CHF-JPY_2 years	1	0.02	10,643,070	163,740	Illiquid	Illiquid
CHF-MXN_<1 week	11	0.17	41,688,200	641,357	Illiquid	Illiquid
CHF-MXN_1 week	4	0.06	2,018,842	31,059	Illiquid	Illiquid
CHF-MXN_1 month	10	0.15	27,953,755	430,058	Illiquid	Illiquid
CHF-MXN_3 months	9	0.14	40,864,792	628,689	Illiquid	Illiquid
CHF-MXN_6 months	1	0.02	203,445	3,130	Illiquid	Illiquid
CHF-MXN_1 year	1	0.02	7,808,886	120,137	Illiquid	Illiquid
CHF-MXN_2 years	1	0.02	2,775,013	42,693	Illiquid	Illiquid
CHF-NOK_<1 week	166	2.55	600,269,311	9,234,912	Illiquid	Illiquid
CHF-NOK_1 week	24	0.37	66,043,546	1,016,055	Illiquid	Illiquid
CHF-NOK_1 month	48	0.74	206,896,807	3,183,028	Illiquid	Illiquid
CHF-NOK_3 months	61	0.94	331,717,123	5,103,340	Illiquid	Illiquid
CHF-NOK_6 months	40	0.62	152,403,336	2,344,667	Illiquid	Illiquid
CHF-NOK_1 year	8	0.12	145,038,828	2,231,367	Illiquid	Illiquid
CHF-NZD_<1 week	310	4.77	254,060,350	3,908,621	Illiquid	Illiquid
CHF-NZD_1 week	86	1.32	34,709,174	533,987	Illiquid	Illiquid
CHF-NZD_1 month	30	0.46	142,006,294	2,184,712	Illiquid	Illiquid
CHF-NZD_3 months	14	0.22	22,068,668	339,518	Illiquid	Illiquid
CHF-NZD_6 months	20	0.31	46,896,804	721,489	Illiquid	Illiquid
CHF-NZD_1 year	1	0.02	1,867,001	28,723	Illiquid	Illiquid
CHF-NZD_2 years	2	0.03	8,961,606	137,871	Illiquid	Illiquid
CHF-PLN_<1 week	41	0.63	268,988,627	4,138,287	Illiquid	Illiquid
CHF-PLN_1 week	14	0.22	12,966,961	199,492	Illiquid	Illiquid
CHF-PLN_1 month	29	0.45	115,563,112	1,777,894	Illiquid	Illiquid
CHF-PLN_3 months	9	0.14	106,872,631	1,644,194	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-PLN__6 months	3	0.05	2,653,462	40,822	Illiquid	Illiquid
CHF-PLN__1 year	1	0.02	92,650	1,425	Illiquid	Illiquid
CHF-PLN__2 years	2	0.03	49,219,956	757,230	Illiquid	Illiquid
CHF-QAR__1 month	1	0.02	1,290,262	19,850	Illiquid	Illiquid
CHF-QAR__2 years	1	0.02	1,290,262	19,850	Illiquid	Illiquid
CHF-RON__<1 week	4	0.06	8,408,771	129,366	Illiquid	Illiquid
CHF-RON__1 week	1	0.02	2,802,924	43,122	Illiquid	Illiquid
CHF-RON__1 month	5	0.08	6,614,900	101,768	Illiquid	Illiquid
CHF-RON__1 year	2	0.03	1,039,185	15,987	Illiquid	Illiquid
CHF-RUB__<1 week	15	0.23	36,170,901	556,475	Illiquid	Illiquid
CHF-RUB__1 week	6	0.09	13,484,905	207,460	Illiquid	Illiquid
CHF-RUB__1 month	4	0.06	18,700,071	287,693	Illiquid	Illiquid
CHF-RUB__3 months	2	0.03	7,559,672	116,303	Illiquid	Illiquid
CHF-RUB__1 year	4	0.06	2,429,933	37,384	Illiquid	Illiquid
CHF-SEK__<1 week	216	3.32	1,477,980,135	22,738,156	Illiquid	Illiquid
CHF-SEK__1 week	54	0.83	598,293,388	9,204,514	Illiquid	Illiquid
CHF-SEK__1 month	100	1.54	755,662,577	11,625,578	Illiquid	Illiquid
CHF-SEK__3 months	80	1.23	648,647,805	9,979,197	Illiquid	Illiquid
CHF-SEK__6 months	41	0.63	582,877,459	8,967,346	Illiquid	Illiquid
CHF-SEK__1 year	23	0.35	119,304,557	1,835,455	Illiquid	Illiquid
CHF-SEK__2 years	1	0.02	1,230,499	18,931	Illiquid	Illiquid
CHF-SGD__<1 week	32	0.49	452,877,957	6,967,353	Illiquid	Illiquid
CHF-SGD__1 week	11	0.17	3,060,203	47,080	Illiquid	Illiquid
CHF-SGD__1 month	16	0.25	43,158,819	663,982	Illiquid	Illiquid
CHF-SGD__3 months	27	0.42	26,335,001	405,154	Illiquid	Illiquid
CHF-SGD__6 months	12	0.18	137,831,405	2,120,483	Illiquid	Illiquid
CHF-SGD__2 years	3	0.05	4,653,971	71,600	Illiquid	Illiquid
CHF-THB__<1 week	10	0.15	6,187,810	95,197	Illiquid	Illiquid
CHF-THB__1 week	2	0.03	356,265	5,481	Illiquid	Illiquid
CHF-THB__3 months	3	0.05	2,080,382	32,006	Illiquid	Illiquid
CHF-THB__6 months	3	0.05	67,109	1,032	Illiquid	Illiquid
CHF-THB__1 year	1	0.02	37,648	579	Illiquid	Illiquid
CHF-THB__2 years	4	0.06	230,408	3,545	Illiquid	Illiquid
CHF-TRY__<1 week	15	0.23	43,987,791	676,735	Illiquid	Illiquid
CHF-TRY__1 week	5	0.08	5,616,476	86,407	Illiquid	Illiquid
CHF-TRY__1 month	7	0.11	928,371	14,283	Illiquid	Illiquid
CHF-TRY__3 months	15	0.23	43,012,735	661,734	Illiquid	Illiquid
CHF-TRY__6 months	1	0.02	1,640,665	25,241	Illiquid	Illiquid
CHF-TRY__1 year	2	0.03	492,200	7,572	Illiquid	Illiquid
CHF-ZAR__<1 week	38	0.58	54,937,750	845,196	Illiquid	Illiquid
CHF-ZAR__1 week	12	0.18	2,943,287	45,281	Illiquid	Illiquid
CHF-ZAR__1 month	12	0.18	13,151,905	202,337	Illiquid	Illiquid
CHF-ZAR__3 months	7	0.11	25,361,855	390,182	Illiquid	Illiquid
CHF-ZAR__6 months	10	0.15	26,628,041	409,662	Illiquid	Illiquid
CHF-ZAR__1 year	4	0.06	2,025,150	31,156	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CHF-ZAR_2 years	1	0.02	820,333	12,621	Illiquid	Illiquid
CNH-SEK_1 week	2	0.03	32,698,738	503,058	Illiquid	Illiquid
CNH-SEK_1 month	3	0.05	27,822,995	428,046	Illiquid	Illiquid
CNH-SEK_3 months	1	0.02	2,333,468	35,900	Illiquid	Illiquid
CNY-DKK_<1 week	7	0.11	25,299,894	389,229	Illiquid	Illiquid
CNY-DKK_1 week	1	0.02	3,736,025	57,477	Illiquid	Illiquid
CNY-DKK_1 month	11	0.17	41,878,505	644,285	Illiquid	Illiquid
CNY-DKK_3 months	5	0.08	4,138,343	63,667	Illiquid	Illiquid
CNY-DKK_6 months	1	0.02	718,017	11,046	Illiquid	Illiquid
CNY-DKK_1 year	1	0.02	4,378,154	67,356	Illiquid	Illiquid
CNY-HKD_<1 week	17	0.26	175,234,097	2,695,909	Illiquid	Illiquid
CNY-HKD_1 week	3	0.05	22,003,106	338,509	Illiquid	Illiquid
CNY-HKD_1 month	3	0.05	62,870,295	967,235	Illiquid	Illiquid
CNY-HKD_3 months	6	0.09	160,288,131	2,465,971	Illiquid	Illiquid
CNY-HKD_6 months	3	0.05	5,901,007	90,785	Illiquid	Illiquid
CNY-HKD_1 year	6	0.09	26,560,418	408,622	Illiquid	Illiquid
CNY-KRW_<1 week	1	0.02	2,335,016	35,923	Illiquid	Illiquid
CNY-KRW_1 week	1	0.02	2,335,016	35,923	Illiquid	Illiquid
CNY-KRW_6 months	3	0.05	33,434,516	514,377	Illiquid	Illiquid
CNY-KRW_1 year	3	0.05	59,107	909	Illiquid	Illiquid
CNY-NOK_1 week	1	0.02	270,901	4,168	Illiquid	Illiquid
CNY-NOK_3 months	1	0.02	270,901	4,168	Illiquid	Illiquid
CNY-PLN_1 month	3	0.05	1,284,259	19,758	Illiquid	Illiquid
CNY-PLN_6 months	1	0.02	233,502	3,592	Illiquid	Illiquid
CNY-PLN_1 year	1	0.02	64,612	994	Illiquid	Illiquid
CNY-SEK_<1 week	42	0.65	163,908,717	2,521,673	Illiquid	Illiquid
CNY-SEK_1 week	23	0.35	10,294,845	158,382	Illiquid	Illiquid
CNY-SEK_1 month	31	0.48	37,689,700	579,842	Illiquid	Illiquid
CNY-SEK_3 months	41	0.63	722,801,858	11,120,029	Illiquid	Illiquid
CNY-SEK_6 months	6	0.09	71,472,404	1,099,575	Illiquid	Illiquid
CNY-SEK_1 year	3	0.05	29,455,411	453,160	Illiquid	Illiquid
CNY-THB_<1 week	2	0.03	78,368	1,206	Illiquid	Illiquid
CNY-THB_1 year	1	0.02	8,213,306	126,359	Illiquid	Illiquid
CNY-THB_2 years	1	0.02	13,463,734	207,134	Illiquid	Illiquid
CNY-TWD_1 week	1	0.02	145,893	2,245	Illiquid	Illiquid
CZK-CNY_1 month	1	0.02	4,995	77	Illiquid	Illiquid
CZK-DKK_<1 week	16	0.25	30,155,468	463,930	Illiquid	Illiquid
CZK-DKK_1 week	11	0.17	159,153	2,449	Illiquid	Illiquid
CZK-DKK_1 month	10	0.15	21,835,952	335,938	Illiquid	Illiquid
CZK-DKK_3 months	5	0.08	4,859,945	74,768	Illiquid	Illiquid
CZK-DKK_6 months	3	0.05	1,285,165	19,772	Illiquid	Illiquid
CZK-DKK_1 year	1	0.02	1,775,064	27,309	Illiquid	Illiquid
CZK-HUF_<1 week	3	0.05	921,672	14,180	Illiquid	Illiquid
CZK-HUF_1 month	1	0.02	8,794	135	Illiquid	Illiquid
CZK-HUF_3 months	8	0.12	26,449,486	406,915	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
CZK-HUF_6 months	2	0.03	18,238,074	280,586	Illiquid	Illiquid
CZK-HUF_1 year	7	0.11	1,682,982	25,892	Illiquid	Illiquid
CZK-HUF_2 years	1	0.02	72,921	1,122	Illiquid	Illiquid
CZK-KWD_<1 week	1	0.02	1,275	20	Illiquid	Illiquid
CZK-NOK_<1 week	12	0.18	11,442,087	176,032	Illiquid	Illiquid
CZK-NOK_1 week	3	0.05	2,333	36	Illiquid	Illiquid
CZK-NOK_1 month	1	0.02	55,400	852	Illiquid	Illiquid
CZK-NOK_3 months	1	0.02	1,214,988	18,692	Illiquid	Illiquid
CZK-NOK_6 months	1	0.02	715,351	11,005	Illiquid	Illiquid
CZK-NOK_1 year	2	0.03	1,242,512	19,116	Illiquid	Illiquid
CZK-RON_1 week	2	0.03	1,389,228	21,373	Illiquid	Illiquid
CZK-RON_1 month	6	0.09	1,845,728	28,396	Illiquid	Illiquid
CZK-RON_3 months	2	0.03	613,769	9,443	Illiquid	Illiquid
CZK-SEK_<1 week	125	1.92	139,885,776	2,152,089	Illiquid	Illiquid
CZK-SEK_1 week	19	0.29	26,954,245	414,681	Illiquid	Illiquid
CZK-SEK_1 month	44	0.68	118,055,889	1,816,244	Illiquid	Illiquid
CZK-SEK_3 months	25	0.38	358,312,980	5,512,507	Illiquid	Illiquid
CZK-SEK_6 months	11	0.17	18,463,333	284,051	Illiquid	Illiquid
CZK-SEK_1 year	8	0.12	21,732,132	334,340	Illiquid	Illiquid
CZK-SEK_2 years	4	0.06	878,055	13,509	Illiquid	Illiquid
CZK-SEK_3 years	4	0.06	878,055	13,509	Illiquid	Illiquid
CZK-TRY_<1 week	1	0.02	649,214	9,988	Illiquid	Illiquid
CZK-TRY_1 week	2	0.03	194,099	2,986	Illiquid	Illiquid
CZK-TRY_3 months	1	0.02	166,459	2,561	Illiquid	Illiquid
DKK-BGN_1 week	1	0.02	728	11	Illiquid	Illiquid
EUR-AED_<1 week	157	2.42	861,766,793	13,257,951	Illiquid	Illiquid
EUR-AED_1 week	109	1.68	442,948,522	6,814,593	Illiquid	Illiquid
EUR-AED_1 month	164	2.52	883,722,059	13,595,724	Illiquid	Illiquid
EUR-AED_3 months	94	1.45	326,132,176	5,017,418	Illiquid	Illiquid
EUR-AED_6 months	40	0.62	132,862,003	2,044,031	Illiquid	Illiquid
EUR-AED_1 year	6	0.09	3,675,630	56,548	Illiquid	Illiquid
EUR-AUD_<1 week	3,082	47.42	16,486,940,429	253,645,237	Liquid	Illiquid
EUR-AUD_1 week	1,315	20.23	3,774,790,099	58,073,694	Illiquid	Illiquid
EUR-AUD_1 month	1,217	18.72	8,937,822,448	137,504,961	Illiquid	Illiquid
EUR-AUD_3 months	1,527	23.49	7,700,406,590	118,467,794	Illiquid	Illiquid
EUR-AUD_6 months	526	8.09	3,511,824,635	54,028,071	Illiquid	Illiquid
EUR-AUD_1 year	93	1.43	228,381,964	3,513,569	Illiquid	Illiquid
EUR-AUD_2 years	41	0.63	205,726,420	3,165,022	Illiquid	Illiquid
EUR-AUD_3 years	4	0.06	2,418,336	37,205	Illiquid	Illiquid
EUR-BGN_<1 week	44	0.68	303,546,082	4,669,940	Illiquid	Illiquid
EUR-BGN_1 week	7	0.11	6,048,471	93,053	Illiquid	Illiquid
EUR-BGN_1 month	14	0.22	143,211,364	2,203,252	Illiquid	Illiquid
EUR-BGN_3 months	12	0.18	139,932,751	2,152,812	Illiquid	Illiquid
EUR-BGN_1 year	3	0.05	44,580,563	685,855	Illiquid	Illiquid
EUR-BHD_<1 week	14	0.22	69,784,414	1,073,606	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-BHD_1 week	19	0.29	34,624,033	532,677	Illiquid	Illiquid
EUR-BHD_1 month	12	0.18	13,730,945	211,245	Illiquid	Illiquid
EUR-BHD_3 months	5	0.08	58,764,795	904,074	Illiquid	Illiquid
EUR-BHD_6 months	6	0.09	17,369,499	267,223	Illiquid	Illiquid
EUR-BRL_1 month	2	0.03	460,100,000	7,078,462	Illiquid	Illiquid
EUR-BRL_3 months	5	0.08	465,379,606	7,159,686	Illiquid	Illiquid
EUR-BRL_6 months	2	0.03	3,775,069	58,078	Illiquid	Illiquid
EUR-BWP_<1 week	3	0.05	3,447,391	53,037	Illiquid	Illiquid
EUR-BWP_1 month	1	0.02	148,515	2,285	Illiquid	Illiquid
EUR-BWP_3 months	9	0.14	18,336,203	282,095	Illiquid	Illiquid
EUR-CAD_<1 week	2,332	35.88	19,716,899,827	303,336,920	Liquid	Illiquid
EUR-CAD_1 week	600	9.23	2,772,172,911	42,648,814	Illiquid	Illiquid
EUR-CAD_1 month	1,003	15.43	10,206,440,810	157,022,166	Illiquid	Illiquid
EUR-CAD_3 months	952	14.65	5,941,106,051	91,401,632	Illiquid	Illiquid
EUR-CAD_6 months	278	4.28	3,174,592,693	48,839,888	Illiquid	Illiquid
EUR-CAD_1 year	103	1.58	1,629,539,299	25,069,835	Illiquid	Illiquid
EUR-CAD_2 years	27	0.42	67,233,753	1,034,365	Illiquid	Illiquid
EUR-CAD_3 years	7	0.11	35,344,901	543,768	Illiquid	Illiquid
EUR-CAD_4 years	3	0.05	365,297	5,620	Illiquid	Illiquid
EUR-CAD_5 years	1	0.02	446,133	6,864	Illiquid	Illiquid
EUR-CAD_6 years	6	0.09	26,838,704	412,903	Illiquid	Illiquid
EUR-CHF_<1 week	4,811	74.02	89,062,553,674	1,370,193,133	Liquid	Liquid
EUR-CHF_1 week	1,439	22.14	13,003,658,725	200,056,288	Illiquid	Liquid
EUR-CHF_1 month	2,544	39.14	32,811,194,981	504,787,615	Liquid	Liquid
EUR-CHF_3 months	1,845	28.38	23,659,744,719	363,996,073	Liquid	Liquid
EUR-CHF_6 months	1,337	20.57	15,284,124,857	235,140,382	Illiquid	Illiquid
EUR-CHF_1 year	342	5.26	2,472,085,821	38,032,090	Illiquid	Illiquid
EUR-CHF_2 years	136	2.09	1,744,736,853	26,842,105	Illiquid	Illiquid
EUR-CHF_3 years	9	0.14	59,590,258	916,773	Illiquid	Illiquid
EUR-CHF_4 years	7	0.11	44,026,869	677,336	Illiquid	Illiquid
EUR-CHF_6 years	4	0.06	32,472,263	499,573	Illiquid	Illiquid
EUR-CHF_16 years	1	0.02	6,613,932	101,753	Illiquid	Illiquid
EUR-CNH_<1 week	1	0.02	11,678,121	179,663	Illiquid	Illiquid
EUR-CNH_1 week	5	0.08	9,461,707	145,565	Illiquid	Illiquid
EUR-CNH_1 month	12	0.18	85,075,737	1,308,857	Illiquid	Illiquid
EUR-CNH_3 months	24	0.37	264,419,336	4,067,990	Illiquid	Illiquid
EUR-CNH_6 months	8	0.12	30,877,108	475,032	Illiquid	Illiquid
EUR-CNH_1 year	10	0.15	22,419,186	344,911	Illiquid	Illiquid
EUR-CNH_2 years	1	0.02	10,000,000	153,846	Illiquid	Illiquid
EUR-CNY_<1 week	143	2.20	942,797,088	14,504,571	Illiquid	Illiquid
EUR-CNY_1 week	67	1.03	164,084,420	2,524,376	Illiquid	Illiquid
EUR-CNY_1 month	164	2.52	920,817,560	14,166,424	Illiquid	Illiquid
EUR-CNY_3 months	137	2.11	963,757,215	14,827,034	Illiquid	Illiquid
EUR-CNY_6 months	81	1.25	327,456,441	5,037,791	Illiquid	Illiquid
EUR-CNY_1 year	75	1.15	71,486,834	1,099,797	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-CNY_2 years	21	0.32	87,341,830	1,343,720	Illiquid	Illiquid
EUR-CNY_3 years	3	0.05	107,433	1,653	Illiquid	Illiquid
EUR-CZK_<1 week	1,674	25.75	15,892,681,999	244,502,800	Illiquid	Illiquid
EUR-CZK_1 week	514	7.91	4,347,149,666	66,879,226	Illiquid	Illiquid
EUR-CZK_1 month	1,479	22.75	7,583,325,756	116,666,550	Illiquid	Illiquid
EUR-CZK_3 months	711	10.94	4,770,810,564	73,397,086	Illiquid	Illiquid
EUR-CZK_6 months	392	6.03	2,058,659,741	31,671,688	Illiquid	Illiquid
EUR-CZK_1 year	174	2.68	460,264,549	7,080,993	Illiquid	Illiquid
EUR-CZK_2 years	85	1.31	194,798,435	2,996,899	Illiquid	Illiquid
EUR-DJF_1 week	1	0.02	23,818	366	Illiquid	Illiquid
EUR-DKK_<1 week	1,040	16.00	24,760,339,678	380,928,303	Liquid	Illiquid
EUR-DKK_1 week	417	6.42	7,944,331,418	122,220,483	Illiquid	Illiquid
EUR-DKK_1 month	694	10.68	10,647,757,719	163,811,657	Illiquid	Illiquid
EUR-DKK_3 months	411	6.32	15,559,099,180	239,370,757	Illiquid	Illiquid
EUR-DKK_6 months	170	2.62	7,191,479,837	110,638,151	Illiquid	Illiquid
EUR-DKK_1 year	35	0.54	774,556,069	11,916,247	Illiquid	Illiquid
EUR-DKK_2 years	9	0.14	1,022,238,456	15,726,745	Illiquid	Illiquid
EUR-DKK_3 years	4	0.06	102,258,881	1,573,214	Illiquid	Illiquid
EUR-GBP_<1 week	9,272	142.65	153,676,973,212	2,364,261,126	Liquid	Liquid
EUR-GBP_1 week	3,542	54.49	34,424,492,991	529,607,584	Liquid	Liquid
EUR-GBP_1 month	6,547	100.72	59,490,025,249	915,231,158	Liquid	Liquid
EUR-GBP_3 months	6,161	94.78	59,965,343,641	922,543,748	Liquid	Liquid
EUR-GBP_6 months	2,747	42.26	37,935,514,430	583,623,299	Liquid	Liquid
EUR-GBP_1 year	1,075	16.54	6,558,885,912	100,905,937	Illiquid	Illiquid
EUR-GBP_2 years	387	5.95	2,056,307,996	31,635,508	Illiquid	Illiquid
EUR-GBP_3 years	46	0.71	86,819,385	1,335,683	Illiquid	Illiquid
EUR-GBP_4 years	4	0.06	22,513,501	346,362	Illiquid	Illiquid
EUR-GBP_6 years	4	0.06	107,085,000	1,647,462	Illiquid	Illiquid
EUR-HKD_<1 week	513	7.89	1,998,773,762	30,750,366	Illiquid	Illiquid
EUR-HKD_1 week	141	2.17	332,991,584	5,122,947	Illiquid	Illiquid
EUR-HKD_1 month	414	6.37	2,299,392,237	35,375,265	Illiquid	Illiquid
EUR-HKD_3 months	348	5.35	1,584,069,733	24,370,304	Illiquid	Illiquid
EUR-HKD_6 months	165	2.54	768,729,336	11,826,605	Illiquid	Illiquid
EUR-HKD_1 year	43	0.66	97,815,320	1,504,851	Illiquid	Illiquid
EUR-HKD_2 years	11	0.17	17,867,590	274,886	Illiquid	Illiquid
EUR-HKD_4 years	1	0.02	1,562,647	24,041	Illiquid	Illiquid
EUR-HRK_<1 week	209	3.22	1,039,638,524	15,994,439	Illiquid	Illiquid
EUR-HRK_1 week	27	0.42	54,390,625	836,779	Illiquid	Illiquid
EUR-HRK_1 month	78	1.20	301,663,938	4,640,984	Illiquid	Illiquid
EUR-HRK_3 months	94	1.45	229,098,710	3,524,596	Illiquid	Illiquid
EUR-HRK_6 months	22	0.34	58,847,883	905,352	Illiquid	Illiquid
EUR-HRK_1 year	11	0.17	37,594,684	578,380	Illiquid	Illiquid
EUR-HRK_2 years	2	0.03	20,000,000	307,692	Illiquid	Illiquid
EUR-HUF_<1 week	1,473	22.66	41,320,475,966	635,699,630	Liquid	Liquid
EUR-HUF_1 week	510	7.85	2,420,449,216	37,237,680	Illiquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-HUF__1 month	1,601	24.63	48,192,485,240	741,422,850	Liquid	Liquid
EUR-HUF__3 months	717	11.03	97,883,658,610	1,505,902,440	Liquid	Liquid
EUR-HUF__6 months	543	8.35	2,823,290,820	43,435,243	Illiquid	Illiquid
EUR-HUF__1 year	147	2.26	371,586,725	5,716,719	Illiquid	Illiquid
EUR-HUF__2 years	26	0.40	102,420,856	1,575,705	Illiquid	Illiquid
EUR-HUF__3 years	1	0.02	2,722,323	41,882	Illiquid	Illiquid
EUR-HUF__4 years	13	0.20	5,001,177	76,941	Illiquid	Illiquid
EUR-HUF__5 years	12	0.18	1,335,197	20,541	Illiquid	Illiquid
EUR-HUF__6 years	1	0.02	4,000,000	61,538	Illiquid	Illiquid
EUR- IDR __<1 week	3	0.05	8,721,560	134,178	Illiquid	Illiquid
EUR- ILS __<1 week	71	1.09	426,631,782	6,563,566	Illiquid	Illiquid
EUR- ILS __1 week	35	0.54	158,830,268	2,443,543	Illiquid	Illiquid
EUR- ILS __1 month	59	0.91	158,840,486	2,443,700	Illiquid	Illiquid
EUR- ILS __3 months	67	1.03	463,794,420	7,135,299	Illiquid	Illiquid
EUR- ILS __6 months	11	0.17	325,730,596	5,011,240	Illiquid	Illiquid
EUR- ILS __1 year	6	0.09	55,354,747	851,611	Illiquid	Illiquid
EUR- INR __<1 week	41	0.63	19,323,041	297,278	Illiquid	Illiquid
EUR- INR __1 week	10	0.15	732,454	11,269	Illiquid	Illiquid
EUR- INR __1 month	76	1.17	38,078,234	585,819	Illiquid	Illiquid
EUR- INR __3 months	73	1.12	13,667,593	210,271	Illiquid	Illiquid
EUR- INR __6 months	34	0.52	41,352,114	636,186	Illiquid	Illiquid
EUR- INR __1 year	29	0.45	16,676,515	256,562	Illiquid	Illiquid
EUR- INR __2 years	6	0.09	2,736,987	42,107	Illiquid	Illiquid
EUR- INR __7 years	1	0.02	4,500,000	69,231	Illiquid	Illiquid
EUR- ISK __<1 week	1	0.02	288,768	4,443	Illiquid	Illiquid
EUR- ISK __1 week	1	0.02	1,867,326	28,728	Illiquid	Illiquid
EUR- JOD __1 week	1	0.02	1,514	23	Illiquid	Illiquid
EUR- JOD __3 months	3	0.05	1,282,556	19,732	Illiquid	Illiquid
EUR- JPY __<1 week	4,521	69.55	115,719,474,011	1,780,299,600	Liquid	Liquid
EUR- JPY __1 week	1,677	25.80	22,262,078,624	342,493,517	Liquid	Liquid
EUR- JPY __1 month	3,065	47.15	28,494,485,530	438,376,700	Liquid	Liquid
EUR- JPY __3 months	2,241	34.48	20,792,768,838	319,888,751	Liquid	Liquid
EUR- JPY __6 months	1,026	15.78	12,164,946,772	187,153,027	Illiquid	Illiquid
EUR- JPY __1 year	248	3.82	2,269,813,526	34,920,208	Illiquid	Illiquid
EUR- JPY __2 years	54	0.83	298,446,944	4,591,491	Illiquid	Illiquid
EUR- JPY __3 years	13	0.20	2,464,825	37,920	Illiquid	Illiquid
EUR- JPY __4 years	3	0.05	25,024,583	384,994	Illiquid	Illiquid
EUR- KES __1 month	5	0.08	20,637,675	317,503	Illiquid	Illiquid
EUR- KES __3 months	11	0.17	6,573,296	101,128	Illiquid	Illiquid
EUR- KRW __<1 week	4	0.06	43,002,120	661,571	Illiquid	Illiquid
EUR- KRW __1 week	2	0.03	7,529,013	115,831	Illiquid	Illiquid
EUR- KRW __1 month	6	0.09	12,287,733	189,042	Illiquid	Illiquid
EUR- KRW __3 months	6	0.09	42,349,273	651,527	Illiquid	Illiquid
EUR- KRW __6 months	3	0.05	2,964,244	45,604	Illiquid	Illiquid
EUR- KWD __<1 week	33	0.51	373,493,956	5,746,061	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-KWD_1 week	27	0.42	68,088,642	1,047,518	Illiquid	Illiquid
EUR-KWD_1 month	41	0.63	195,694,982	3,010,692	Illiquid	Illiquid
EUR-KWD_3 months	9	0.14	199,023,552	3,061,901	Illiquid	Illiquid
EUR-KWD_6 months	2	0.03	3,445,738	53,011	Illiquid	Illiquid
EUR-KWD_1 year	2	0.03	1,248,653	19,210	Illiquid	Illiquid
EUR-KWD_2 years	4	0.06	453,253	6,973	Illiquid	Illiquid
EUR-KZT_<1 week	3	0.05	8,603,393	132,360	Illiquid	Illiquid
EUR-KZT_1 month	3	0.05	819,001	12,600	Illiquid	Illiquid
EUR-KZT_3 months	4	0.06	21,388,192	329,049	Illiquid	Illiquid
EUR-KZT_6 months	4	0.06	39,888,299	613,666	Illiquid	Illiquid
EUR-LTL_<1 week	147	2.26	529,219,629	8,141,840	Illiquid	Illiquid
EUR-LTL_1 week	43	0.66	54,569,076	839,524	Illiquid	Illiquid
EUR-LTL_1 month	64	0.98	308,452,880	4,745,429	Illiquid	Illiquid
EUR-LTL_3 months	27	0.42	174,744,034	2,688,370	Illiquid	Illiquid
EUR-LTL_6 months	7	0.11	66,486,589	1,022,871	Illiquid	Illiquid
EUR-LTL_1 year	6	0.09	3,993,169	61,433	Illiquid	Illiquid
EUR-MAD_<1 week	22	0.34	9,122,598	140,348	Illiquid	Illiquid
EUR-MAD_1 week	5	0.08	652,392	10,037	Illiquid	Illiquid
EUR-MAD_1 month	25	0.38	26,212,923	403,276	Illiquid	Illiquid
EUR-MAD_3 months	8	0.12	8,916,320	137,174	Illiquid	Illiquid
EUR-MAD_6 months	1	0.02	4,136,232	63,634	Illiquid	Illiquid
EUR-MAD_1 year	4	0.06	12,731,922	195,876	Illiquid	Illiquid
EUR-MAD_2 years	1	0.02	618,464	9,515	Illiquid	Illiquid
EUR-MUR_1 week	2	0.03	217,538	3,347	Illiquid	Illiquid
EUR-MUR_1 month	3	0.05	4,837,995	74,431	Illiquid	Illiquid
EUR-MUR_3 months	1	0.02	70,007	1,077	Illiquid	Illiquid
EUR-MUR_6 months	3	0.05	210,022	3,231	Illiquid	Illiquid
EUR-MXN_<1 week	402	6.18	2,611,483,544	40,176,670	Illiquid	Illiquid
EUR-MXN_1 week	148	2.28	762,840,965	11,736,015	Illiquid	Illiquid
EUR-MXN_1 month	332	5.11	2,127,218,617	32,726,440	Illiquid	Illiquid
EUR-MXN_3 months	221	3.40	1,386,592,807	21,332,197	Illiquid	Illiquid
EUR-MXN_6 months	65	1.00	321,044,445	4,939,145	Illiquid	Illiquid
EUR-MXN_1 year	40	0.62	217,098,767	3,339,981	Illiquid	Illiquid
EUR-MXN_2 years	10	0.15	43,287,198	665,957	Illiquid	Illiquid
EUR-MXN_3 years	1	0.02	5,500,000	84,615	Illiquid	Illiquid
EUR-MYR_<1 week	1	0.02	3,543,560	54,516	Illiquid	Illiquid
EUR-MYR_1 week	3	0.05	194,805	2,997	Illiquid	Illiquid
EUR-MYR_6 months	1	0.02	3,500,539	53,854	Illiquid	Illiquid
EUR-NGN_<1 week	1	0.02	2,021,193	31,095	Illiquid	Illiquid
EUR-NGN_1 week	3	0.05	6,749,809	103,843	Illiquid	Illiquid
EUR-NGN_3 months	1	0.02	2,619,017	40,293	Illiquid	Illiquid
EUR-NOK_<1 week	2,444	37.60	32,898,462,346	506,130,190	Liquid	Illiquid
EUR-NOK_1 week	609	9.37	4,473,099,890	68,816,921	Illiquid	Illiquid
EUR-NOK_1 month	2,031	31.25	11,553,012,178	177,738,649	Illiquid	Illiquid
EUR-NOK_3 months	1,719	26.45	9,856,860,182	151,644,003	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-NOK__6 months	798	12.28	5,849,119,419	89,986,453	Illiquid	Illiquid
EUR-NOK__1 year	124	1.91	361,746,740	5,565,334	Illiquid	Illiquid
EUR-NOK__2 years	39	0.60	135,615,468	2,086,392	Illiquid	Illiquid
EUR-NOK__3 years	11	0.17	11,449,447	176,145	Illiquid	Illiquid
EUR-NOK__4 years	11	0.17	12,067,478	185,654	Illiquid	Illiquid
EUR-NZD__<1 week	1,186	18.25	3,691,504,634	56,792,379	Illiquid	Illiquid
EUR-NZD__1 week	535	8.23	796,386,165	12,252,095	Illiquid	Illiquid
EUR-NZD__1 month	258	3.97	907,700,058	13,964,616	Illiquid	Illiquid
EUR-NZD__3 months	165	2.54	1,966,243,457	30,249,899	Illiquid	Illiquid
EUR-NZD__6 months	57	0.88	278,685,035	4,287,462	Illiquid	Illiquid
EUR-NZD__1 year	36	0.55	137,749,328	2,119,220	Illiquid	Illiquid
EUR-NZD__2 years	29	0.45	6,711,192	103,249	Illiquid	Illiquid
EUR-OMR__<1 week	3	0.05	1,357,137	20,879	Illiquid	Illiquid
EUR-OMR__1 week	7	0.11	1,391,906	21,414	Illiquid	Illiquid
EUR-OMR__1 month	5	0.08	6,769,613	104,148	Illiquid	Illiquid
EUR-OMR__3 months	4	0.06	5,495,070	84,540	Illiquid	Illiquid
EUR-OMR__6 months	1	0.02	6,489,552	99,839	Illiquid	Illiquid
EUR-PEN__3 months	1	0.02	178,777	2,750	Illiquid	Illiquid
EUR-PHP__1 month	1	0.02	39,365	606	Illiquid	Illiquid
EUR-PHP__3 months	3	0.05	99,919	1,537	Illiquid	Illiquid
EUR-PLN__<1 week	2,089	32.14	12,144,391,923	186,836,799	Illiquid	Illiquid
EUR-PLN__1 week	616	9.48	4,003,375,170	61,590,387	Illiquid	Illiquid
EUR-PLN__1 month	2,012	30.95	9,051,075,443	139,247,315	Illiquid	Illiquid
EUR-PLN__3 months	1,631	25.09	8,612,234,606	132,495,917	Illiquid	Illiquid
EUR-PLN__6 months	818	12.58	3,320,020,187	51,077,234	Illiquid	Illiquid
EUR-PLN__1 year	211	3.25	697,088,777	10,724,443	Illiquid	Illiquid
EUR-PLN__2 years	95	1.46	214,488,307	3,299,820	Illiquid	Illiquid
EUR-PLN__3 years	23	0.35	31,237,108	480,571	Illiquid	Illiquid
EUR-PLN__4 years	13	0.20	59,577,228	916,573	Illiquid	Illiquid
EUR-PLN__5 years	16	0.25	33,930,355	522,005	Illiquid	Illiquid
EUR-PLN__6 years	8	0.12	1,956,006	30,092	Illiquid	Illiquid
EUR-PLN__7 years	1	0.02	199,855	3,075	Illiquid	Illiquid
EUR-QAR__<1 week	22	0.34	294,924,925	4,537,307	Illiquid	Illiquid
EUR-QAR__1 week	14	0.22	42,969,032	661,062	Illiquid	Illiquid
EUR-QAR__1 month	33	0.51	195,273,388	3,004,206	Illiquid	Illiquid
EUR-QAR__3 months	15	0.23	274,903,526	4,229,285	Illiquid	Illiquid
EUR-QAR__6 months	18	0.28	61,971,754	953,412	Illiquid	Illiquid
EUR-QAR__1 year	8	0.12	10,688,752	164,442	Illiquid	Illiquid
EUR-QAR__2 years	2	0.03	7,928,385	121,975	Illiquid	Illiquid
EUR-RON__<1 week	1,357	20.88	17,014,238,379	261,757,514	Liquid	Illiquid
EUR-RON__1 week	227	3.49	2,057,088,521	31,647,516	Illiquid	Illiquid
EUR-RON__1 month	546	8.40	4,699,167,546	72,294,885	Illiquid	Illiquid
EUR-RON__3 months	306	4.71	1,779,171,683	27,371,872	Illiquid	Illiquid
EUR-RON__6 months	144	2.22	1,056,592,357	16,255,267	Illiquid	Illiquid
EUR-RON__1 year	107	1.65	436,588,420	6,716,745	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-RON_2 years	72	1.11	404,865,410	6,228,699	Illiquid	Illiquid
EUR-RON_3 years	2	0.03	11,000,000	169,231	Illiquid	Illiquid
EUR-RSD_<1 week	147	2.26	599,533,882	9,223,598	Illiquid	Illiquid
EUR-RSD_1 week	5	0.08	23,966,811	368,720	Illiquid	Illiquid
EUR-RSD_1 month	24	0.37	125,807,654	1,935,502	Illiquid	Illiquid
EUR-RSD_3 months	44	0.68	218,699,763	3,364,612	Illiquid	Illiquid
EUR-RSD_6 months	8	0.12	31,670,033	487,231	Illiquid	Illiquid
EUR-RSD_2 years	1	0.02	35,000,000	538,462	Illiquid	Illiquid
EUR-RUB_<1 week	1,429	21.98	13,002,451,071	200,037,709	Illiquid	Illiquid
EUR-RUB_1 week	231	3.55	2,477,617,144	38,117,187	Illiquid	Illiquid
EUR-RUB_1 month	312	4.80	2,383,236,551	36,665,178	Illiquid	Illiquid
EUR-RUB_3 months	254	3.91	9,737,300,894	149,804,629	Illiquid	Illiquid
EUR-RUB_6 months	152	2.34	1,018,790,084	15,673,694	Illiquid	Illiquid
EUR-RUB_1 year	111	1.71	602,027,567	9,261,963	Illiquid	Illiquid
EUR-RUB_2 years	19	0.29	49,925,452	768,084	Illiquid	Illiquid
EUR-RUB_3 years	7	0.11	23,981,603	368,948	Illiquid	Illiquid
EUR-RUB_4 years	4	0.06	1,894,267	29,143	Illiquid	Illiquid
EUR-RUB_6 years	1	0.02	152,986	2,354	Illiquid	Illiquid
EUR-SAR_<1 week	52	0.80	958,616,413	14,747,945	Illiquid	Illiquid
EUR-SAR_1 week	24	0.37	89,203,558	1,372,362	Illiquid	Illiquid
EUR-SAR_1 month	40	0.62	442,882,454	6,813,576	Illiquid	Illiquid
EUR-SAR_3 months	54	0.83	688,559,186	10,593,218	Illiquid	Illiquid
EUR-SAR_6 months	12	0.18	252,716,532	3,887,947	Illiquid	Illiquid
EUR-SAR_1 year	2	0.03	3,538,858	54,444	Illiquid	Illiquid
EUR-SAR_2 years	1	0.02	5,494,330	84,528	Illiquid	Illiquid
EUR-SEK_<1 week	4,595	70.69	60,424,630,558	929,609,701	Liquid	Liquid
EUR-SEK_1 week	1,221	18.78	13,937,958,111	214,430,125	Illiquid	Liquid
EUR-SEK_1 month	3,708	57.05	35,077,015,572	539,646,393	Liquid	Liquid
EUR-SEK_3 months	2,679	41.22	27,257,646,396	419,348,406	Liquid	Liquid
EUR-SEK_6 months	1,339	20.60	21,526,145,078	331,171,463	Liquid	Liquid
EUR-SEK_1 year	350	5.38	4,235,226,735	65,157,334	Illiquid	Illiquid
EUR-SEK_2 years	103	1.58	400,817,766	6,166,427	Illiquid	Illiquid
EUR-SEK_3 years	22	0.34	9,168,550	141,055	Illiquid	Illiquid
EUR-SEK_4 years	14	0.22	3,460,098	53,232	Illiquid	Illiquid
EUR-SEK_5 years	16	0.25	24,937,591	383,655	Illiquid	Illiquid
EUR-SEK_6 years	4	0.06	2,499,180	38,449	Illiquid	Illiquid
EUR-SEK_7 years	5	0.08	3,498,852	53,828	Illiquid	Illiquid
EUR-SGD_<1 week	577	8.88	3,338,572,061	51,362,647	Illiquid	Illiquid
EUR-SGD_1 week	198	3.05	821,004,955	12,630,845	Illiquid	Illiquid
EUR-SGD_1 month	578	8.89	3,118,641,234	47,979,096	Illiquid	Illiquid
EUR-SGD_3 months	283	4.35	2,365,514,577	36,392,532	Illiquid	Illiquid
EUR-SGD_6 months	135	2.08	574,306,892	8,835,491	Illiquid	Illiquid
EUR-SGD_1 year	45	0.69	291,741,915	4,488,337	Illiquid	Illiquid
EUR-SGD_2 years	9	0.14	18,569,709	285,688	Illiquid	Illiquid
EUR-THB_<1 week	107	1.65	356,496,408	5,484,560	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-THB__1 week	48	0.74	22,250,194	342,311	Illiquid	Illiquid
EUR-THB__1 month	121	1.86	125,096,548	1,924,562	Illiquid	Illiquid
EUR-THB__3 months	107	1.65	344,637,953	5,302,122	Illiquid	Illiquid
EUR-THB__6 months	32	0.49	175,735,899	2,703,629	Illiquid	Illiquid
EUR-THB__1 year	21	0.32	19,784,300	304,374	Illiquid	Illiquid
EUR-THB__2 years	8	0.12	3,768,682	57,980	Illiquid	Illiquid
EUR-TND__<1 week	12	0.18	10,175,565	156,547	Illiquid	Illiquid
EUR-TND__1 week	5	0.08	460,331	7,082	Illiquid	Illiquid
EUR-TND__1 month	21	0.32	12,692,291	195,266	Illiquid	Illiquid
EUR-TND__3 months	7	0.11	860,904	13,245	Illiquid	Illiquid
EUR-TND__6 months	1	0.02	66,602	1,025	Illiquid	Illiquid
EUR-TND__2 years	1	0.02	63,637	979	Illiquid	Illiquid
EUR-TRY__<1 week	1,025	15.77	11,425,702,405	175,780,037	Illiquid	Illiquid
EUR-TRY__1 week	280	4.31	1,494,663,188	22,994,818	Illiquid	Illiquid
EUR-TRY__1 month	370	5.69	3,412,680,132	52,502,771	Illiquid	Illiquid
EUR-TRY__3 months	385	5.92	3,667,399,911	56,421,537	Illiquid	Illiquid
EUR-TRY__6 months	108	1.66	685,575,700	10,547,318	Illiquid	Illiquid
EUR-TRY__1 year	33	0.51	60,935,200	937,465	Illiquid	Illiquid
EUR-TRY__2 years	15	0.23	57,809,959	889,384	Illiquid	Illiquid
EUR-TRY__3 years	1	0.02	480,575	7,393	Illiquid	Illiquid
EUR-TWD__<1 week	1	0.02	19,200	295	Illiquid	Illiquid
EUR-TWD__1 week	1	0.02	640,000	9,846	Illiquid	Illiquid
EUR-TWD__1 month	3	0.05	4,066,289	62,558	Illiquid	Illiquid
EUR-TWD__3 months	2	0.03	1,036,600	15,948	Illiquid	Illiquid
EUR-TWD__1 year	1	0.02	500,000	7,692	Illiquid	Illiquid
EUR-UAH__6 months	4	0.06	46,429,100	714,294	Illiquid	Illiquid
EUR-UAH__1 year	1	0.02	9,193,562	141,439	Illiquid	Illiquid
EUR-USD__<1 week	41,751	642.32	2,192,874,414,559	33,736,529,455	Liquid	Liquid
EUR-USD__1 week	15,213	234.05	231,276,055,466	3,558,093,161	Liquid	Liquid
EUR-USD__1 month	23,470	361.08	418,551,168,330	6,439,248,744	Liquid	Liquid
EUR-USD__3 months	19,892	306.03	329,164,145,374	5,064,063,775	Liquid	Liquid
EUR-USD__6 months	13,928	214.28	202,074,343,723	3,108,836,057	Liquid	Liquid
EUR-USD__1 year	4,341	66.78	32,323,332,545	497,282,039	Liquid	Liquid
EUR-USD__2 years	1,554	23.91	14,094,608,167	216,840,126	Illiquid	Illiquid
EUR-USD__3 years	292	4.49	1,420,791,551	21,858,332	Illiquid	Illiquid
EUR-USD__4 years	70	1.08	2,058,423,944	31,668,061	Illiquid	Illiquid
EUR-USD__5 years	50	0.77	770,551,283	11,854,635	Illiquid	Illiquid
EUR-USD__6 years	35	0.54	461,581,038	7,101,247	Illiquid	Illiquid
EUR-USD__7 years	7	0.11	31,724,544	488,070	Illiquid	Illiquid
EUR-USD__8 years	6	0.09	33,211,112	510,940	Illiquid	Illiquid
EUR-USD__16 years	2	0.03	20,000,000	307,692	Illiquid	Illiquid
EUR-USD__91 years	1	0.02	57,791	889	Illiquid	Illiquid
EUR-USD__11 years	2	0.03	15,717,860	241,813	Illiquid	Illiquid
EUR-USD__12 years	2	0.03	8,271,393	127,252	Illiquid	Illiquid
EUR-USD__9 years	3	0.05	13,652,783	210,043	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR-VND_<1 week	1	0.02	5,304	82	Illiquid	Illiquid
EUR-VND_1 month	2	0.03	57,110	879	Illiquid	Illiquid
EUR-XAF_<1 week	1	0.02	38,112	586	Illiquid	Illiquid
EUR-XAU_<1 week	7	0.11	79,400,361	1,221,544	Illiquid	Illiquid
EUR-XAU_1 week	1	0.02	1,387,410	21,345	Illiquid	Illiquid
EUR-ZAR_<1 week	448	6.89	2,268,364,404	34,897,914	Illiquid	Illiquid
EUR-ZAR_1 week	223	3.43	483,558,128	7,439,356	Illiquid	Illiquid
EUR-ZAR_1 month	291	4.48	1,262,906,663	19,429,333	Illiquid	Illiquid
EUR-ZAR_3 months	250	3.85	1,337,087,038	20,570,570	Illiquid	Illiquid
EUR-ZAR_6 months	107	1.65	290,376,678	4,467,334	Illiquid	Illiquid
EUR-ZAR_1 year	57	0.88	104,664,598	1,610,225	Illiquid	Illiquid
EUR-ZAR_2 years	20	0.31	29,983,988	461,292	Illiquid	Illiquid
EUR-ZAR_3 years	4	0.06	21,509,132	330,910	Illiquid	Illiquid
GBP-AED_<1 week	82	1.26	11,824,871	181,921	Illiquid	Illiquid
GBP-AED_1 week	34	0.52	3,039,367	46,759	Illiquid	Illiquid
GBP-AED_1 month	12	0.18	4,848,449	74,592	Illiquid	Illiquid
GBP-AED_3 months	9	0.14	6,223,609	95,748	Illiquid	Illiquid
GBP-AED_6 months	6	0.09	1,028,027	15,816	Illiquid	Illiquid
GBP-AED_1 year	5	0.08	1,533,593	23,594	Illiquid	Illiquid
GBP-AED_2 years	1	0.02	538,784	8,289	Illiquid	Illiquid
GBP-AUD_<1 week	1,615	24.85	5,552,955,508	85,430,085	Illiquid	Illiquid
GBP-AUD_1 week	589	9.06	1,247,926,162	19,198,864	Illiquid	Illiquid
GBP-AUD_1 month	523	8.05	2,162,658,772	33,271,673	Illiquid	Illiquid
GBP-AUD_3 months	763	11.74	2,778,668,213	42,748,742	Illiquid	Illiquid
GBP-AUD_6 months	202	3.11	1,579,098,743	24,293,827	Illiquid	Illiquid
GBP-AUD_1 year	50	0.77	415,041,935	6,385,261	Illiquid	Illiquid
GBP-AUD_2 years	26	0.40	18,696,188	287,634	Illiquid	Illiquid
GBP-AUD_3 years	4	0.06	2,007,203	30,880	Illiquid	Illiquid
GBP-BGN_<1 week	7	0.11	1,488,438	22,899	Illiquid	Illiquid
GBP-BGN_1 week	1	0.02	1,596	25	Illiquid	Illiquid
GBP-BGN_1 month	2	0.03	731,159	11,249	Illiquid	Illiquid
GBP-BGN_6 months	3	0.05	77,238	1,188	Illiquid	Illiquid
GBP-BHD_<1 week	1	0.02	76,945	1,184	Illiquid	Illiquid
GBP-BHD_1 week	2	0.03	711,112	10,940	Illiquid	Illiquid
GBP-CAD_<1 week	1,214	18.68	10,018,580,415	154,132,006	Illiquid	Illiquid
GBP-CAD_1 week	285	4.38	743,443,134	11,437,587	Illiquid	Illiquid
GBP-CAD_1 month	231	3.55	2,072,894,608	31,890,686	Illiquid	Illiquid
GBP-CAD_3 months	215	3.31	872,898,788	13,429,212	Illiquid	Illiquid
GBP-CAD_6 months	135	2.08	1,038,070,125	15,970,310	Illiquid	Illiquid
GBP-CAD_1 year	23	0.35	86,817,264	1,335,650	Illiquid	Illiquid
GBP-CAD_2 years	15	0.23	2,493,969	38,369	Illiquid	Illiquid
GBP-CAD_3 years	4	0.06	1,620,110	24,925	Illiquid	Illiquid
GBP-CHF_<1 week	1,328	20.43	5,554,134,432	85,448,222	Illiquid	Illiquid
GBP-CHF_1 week	289	4.45	617,287,850	9,496,736	Illiquid	Illiquid
GBP-CHF_1 month	244	3.75	1,845,892,687	28,398,349	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-CHF_3 months	177	2.72	1,640,120,249	25,232,619	Illiquid	Illiquid
GBP-CHF_6 months	146	2.25	978,145,039	15,048,385	Illiquid	Illiquid
GBP-CHF_1 year	18	0.28	59,551,228	916,173	Illiquid	Illiquid
GBP-CHF_2 years	13	0.20	5,906,186	90,864	Illiquid	Illiquid
GBP-CHF_3 years	2	0.03	256,354	3,944	Illiquid	Illiquid
GBP-CHF_4 years	2	0.03	410,166	6,310	Illiquid	Illiquid
GBP-CHF_5 years	1	0.02	481,945	7,415	Illiquid	Illiquid
GBP-CNY_<1 week	12	0.18	4,050,289	62,312	Illiquid	Illiquid
GBP-CNY_1 week	4	0.06	2,236,140	34,402	Illiquid	Illiquid
GBP-CNY_1 month	9	0.14	61,548,149	946,895	Illiquid	Illiquid
GBP-CNY_3 months	8	0.12	57,858,197	890,126	Illiquid	Illiquid
GBP-CNY_6 months	1	0.02	22,412	345	Illiquid	Illiquid
GBP-CNY_1 year	2	0.03	35,025	539	Illiquid	Illiquid
GBP-CNY_2 years	2	0.03	1,459,385	22,452	Illiquid	Illiquid
GBP-CNY_3 years	1	0.02	875,631	13,471	Illiquid	Illiquid
GBP-CZK_<1 week	108	1.66	404,856,808	6,228,566	Illiquid	Illiquid
GBP-CZK_1 week	66	1.02	194,336,772	2,989,796	Illiquid	Illiquid
GBP-CZK_1 month	88	1.35	475,244,500	7,311,454	Illiquid	Illiquid
GBP-CZK_3 months	68	1.05	959,274,851	14,758,075	Illiquid	Illiquid
GBP-CZK_6 months	16	0.25	178,184,004	2,741,292	Illiquid	Illiquid
GBP-CZK_1 year	8	0.12	3,141,485	48,331	Illiquid	Illiquid
GBP-CZK_2 years	2	0.03	121,350	1,867	Illiquid	Illiquid
GBP-DKK_<1 week	299	4.60	2,733,913,313	42,060,205	Illiquid	Illiquid
GBP-DKK_1 week	118	1.82	821,903,826	12,644,674	Illiquid	Illiquid
GBP-DKK_1 month	236	3.63	1,796,276,881	27,635,029	Illiquid	Illiquid
GBP-DKK_3 months	111	1.71	1,063,956,592	16,368,563	Illiquid	Illiquid
GBP-DKK_6 months	66	1.02	838,161,394	12,894,791	Illiquid	Illiquid
GBP-DKK_1 year	26	0.40	9,663,727	148,673	Illiquid	Illiquid
GBP-DKK_2 years	13	0.20	5,686,209	87,480	Illiquid	Illiquid
GBP-DKK_3 years	1	0.02	83,015	1,277	Illiquid	Illiquid
GBP-GHS_1 month	1	0.02	262,451	4,038	Illiquid	Illiquid
GBP-GHS_3 months	1	0.02	472,412	7,268	Illiquid	Illiquid
GBP-HKD_<1 week	138	2.12	592,559,393	9,116,298	Illiquid	Illiquid
GBP-HKD_1 week	95	1.46	351,651,931	5,410,030	Illiquid	Illiquid
GBP-HKD_1 month	143	2.20	834,370,958	12,836,476	Illiquid	Illiquid
GBP-HKD_3 months	98	1.51	983,491,102	15,130,632	Illiquid	Illiquid
GBP-HKD_6 months	68	1.05	149,774,336	2,304,221	Illiquid	Illiquid
GBP-HKD_1 year	25	0.38	233,502,823	3,592,351	Illiquid	Illiquid
GBP-HKD_2 years	1	0.02	606,751	9,335	Illiquid	Illiquid
GBP-HRK_<1 week	2	0.03	7,591,957	116,799	Illiquid	Illiquid
GBP-HRK_1 week	1	0.02	27,223	419	Illiquid	Illiquid
GBP-HRK_3 months	7	0.11	8,163,084	125,586	Illiquid	Illiquid
GBP-HRK_6 months	2	0.03	930,321	14,313	Illiquid	Illiquid
GBP-HUF_<1 week	88	1.35	238,814,431	3,674,068	Illiquid	Illiquid
GBP-HUF_1 week	27	0.42	128,605,603	1,978,548	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-HUF__1 month	68	1.05	352,354,028	5,420,831	Illiquid	Illiquid
GBP-HUF__3 months	26	0.40	88,530,204	1,362,003	Illiquid	Illiquid
GBP-HUF__6 months	17	0.26	96,480,219	1,484,311	Illiquid	Illiquid
GBP-HUF__1 year	11	0.17	44,466,770	684,104	Illiquid	Illiquid
GBP-HUF__2 years	3	0.05	64,973	1,000	Illiquid	Illiquid
GBP-IDR__1 week	1	0.02	46,094	709	Illiquid	Illiquid
GBP-ILS__<1 week	28	0.43	56,566,837	870,259	Illiquid	Illiquid
GBP-ILS__1 week	4	0.06	3,192,135	49,110	Illiquid	Illiquid
GBP-ILS__1 month	8	0.12	113,228,206	1,741,972	Illiquid	Illiquid
GBP-ILS__3 months	3	0.05	157,743	2,427	Illiquid	Illiquid
GBP-INR__<1 week	12	0.18	1,616,384	24,867	Illiquid	Illiquid
GBP-INR__1 week	8	0.12	6,469,888	99,537	Illiquid	Illiquid
GBP-INR__1 month	12	0.18	2,592,133	39,879	Illiquid	Illiquid
GBP-INR__3 months	10	0.15	10,613,035	163,277	Illiquid	Illiquid
GBP-INR__6 months	11	0.17	4,732,655	72,810	Illiquid	Illiquid
GBP-INR__1 year	5	0.08	586,995	9,031	Illiquid	Illiquid
GBP-INR__2 years	3	0.05	1,686,767	25,950	Illiquid	Illiquid
GBP-INR__6 years	1	0.02	46,489	715	Illiquid	Illiquid
GBP-JPY__<1 week	2,439	37.52	33,680,530,255	518,162,004	Liquid	Illiquid
GBP-JPY__1 week	849	13.06	7,676,001,679	118,092,334	Illiquid	Illiquid
GBP-JPY__1 month	768	11.82	6,788,730,853	104,442,013	Illiquid	Illiquid
GBP-JPY__3 months	502	7.72	2,629,954,078	40,460,832	Illiquid	Illiquid
GBP-JPY__6 months	345	5.31	2,711,078,963	41,708,907	Illiquid	Illiquid
GBP-JPY__1 year	34	0.52	425,231,740	6,542,027	Illiquid	Illiquid
GBP-JPY__2 years	12	0.18	374,698,079	5,764,586	Illiquid	Illiquid
GBP-KES__<1 week	4	0.06	59,894	921	Illiquid	Illiquid
GBP-KES__1 week	1	0.02	250,356	3,852	Illiquid	Illiquid
GBP-KES__1 month	1	0.02	261,956	4,030	Illiquid	Illiquid
GBP-KES__3 months	2	0.03	520,991	8,015	Illiquid	Illiquid
GBP-KES__6 months	1	0.02	5,841,646	89,871	Illiquid	Illiquid
GBP-KES__1 year	4	0.06	59,894	921	Illiquid	Illiquid
GBP-KWD__<1 week	5	0.08	9,621,234	148,019	Illiquid	Illiquid
GBP-KWD__1 week	5	0.08	24,071	370	Illiquid	Illiquid
GBP-KWD__1 month	1	0.02	389,546	5,993	Illiquid	Illiquid
GBP-KWD__3 months	2	0.03	9,224,427	141,914	Illiquid	Illiquid
GBP-LTL__<1 week	5	0.08	53,213	819	Illiquid	Illiquid
GBP-LTL__3 months	3	0.05	54,608	840	Illiquid	Illiquid
GBP-MAD__<1 week	6	0.09	570,904	8,783	Illiquid	Illiquid
GBP-MAD__1 month	5	0.08	149,525	2,300	Illiquid	Illiquid
GBP-MAD__3 months	5	0.08	134,729	2,073	Illiquid	Illiquid
GBP-MAD__6 months	1	0.02	37,081	570	Illiquid	Illiquid
GBP-MUR__<1 week	2	0.03	1,786,394	27,483	Illiquid	Illiquid
GBP-MUR__1 week	2	0.03	362,987	5,584	Illiquid	Illiquid
GBP-MUR__3 months	1	0.02	485,401	7,468	Illiquid	Illiquid
GBP-MXN__<1 week	53	0.82	161,661,438	2,487,099	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-MXN__1 week	29	0.45	73,612,761	1,132,504	Illiquid	Illiquid
GBP-MXN__1 month	56	0.86	256,314,107	3,943,294	Illiquid	Illiquid
GBP-MXN__3 months	43	0.66	126,800,705	1,950,780	Illiquid	Illiquid
GBP-MXN__6 months	20	0.31	115,491,340	1,776,790	Illiquid	Illiquid
GBP-MXN__1 year	1	0.02	1,410,587	21,701	Illiquid	Illiquid
GBP-MXN__2 years	1	0.02	832,504	12,808	Illiquid	Illiquid
GBP-MYR__1 week	5	0.08	95,931	1,476	Illiquid	Illiquid
GBP-NOK__<1 week	389	5.98	2,414,720,392	37,149,544	Illiquid	Illiquid
GBP-NOK__1 week	126	1.94	533,963,607	8,214,825	Illiquid	Illiquid
GBP-NOK__1 month	209	3.22	1,051,626,684	16,178,872	Illiquid	Illiquid
GBP-NOK__3 months	144	2.22	1,372,046,517	21,108,408	Illiquid	Illiquid
GBP-NOK__6 months	81	1.25	281,872,554	4,336,501	Illiquid	Illiquid
GBP-NOK__1 year	38	0.58	15,670,998	241,092	Illiquid	Illiquid
GBP-NOK__2 years	15	0.23	7,967,206	122,572	Illiquid	Illiquid
GBP-NOK__3 years	4	0.06	752,945	11,584	Illiquid	Illiquid
GBP-NOK__4 years	3	0.05	682,394	10,498	Illiquid	Illiquid
GBP-NZD__<1 week	953	14.66	2,200,076,611	33,847,332	Illiquid	Illiquid
GBP-NZD__1 week	619	9.52	128,063,174	1,970,203	Illiquid	Illiquid
GBP-NZD__1 month	123	1.89	839,318,259	12,912,589	Illiquid	Illiquid
GBP-NZD__3 months	114	1.75	1,956,967,775	30,107,197	Illiquid	Illiquid
GBP-NZD__6 months	81	1.25	79,631,171	1,225,095	Illiquid	Illiquid
GBP-NZD__1 year	16	0.25	11,556,817	177,797	Illiquid	Illiquid
GBP-NZD__2 years	2	0.03	70,527	1,085	Illiquid	Illiquid
GBP-OMR__<1 week	2	0.03	10,282	158	Illiquid	Illiquid
GBP-OMR__1 week	2	0.03	2,347	36	Illiquid	Illiquid
GBP-OMR__1 year	2	0.03	144,848	2,228	Illiquid	Illiquid
GBP-PHP__<1 week	1	0.02	140,355	2,159	Illiquid	Illiquid
GBP-PLN__<1 week	199	3.06	387,467,396	5,961,037	Illiquid	Illiquid
GBP-PLN__1 week	69	1.06	88,476,817	1,361,182	Illiquid	Illiquid
GBP-PLN__1 month	94	1.45	265,638,872	4,086,752	Illiquid	Illiquid
GBP-PLN__3 months	71	1.09	122,419,079	1,883,370	Illiquid	Illiquid
GBP-PLN__6 months	42	0.65	206,193,972	3,172,215	Illiquid	Illiquid
GBP-PLN__1 year	23	0.35	18,321,816	281,874	Illiquid	Illiquid
GBP-PLN__2 years	14	0.22	15,612,675	240,195	Illiquid	Illiquid
GBP-PLN__3 years	1	0.02	303,375	4,667	Illiquid	Illiquid
GBP-QAR__<1 week	2	0.03	115,385	1,775	Illiquid	Illiquid
GBP-QAR__1 week	2	0.03	654,158	10,064	Illiquid	Illiquid
GBP-QAR__1 month	2	0.03	21,909	337	Illiquid	Illiquid
GBP-QAR__3 months	1	0.02	81,724	1,257	Illiquid	Illiquid
GBP-QAR__1 year	1	0.02	36,987	569	Illiquid	Illiquid
GBP-RON__<1 week	16	0.25	91,663,058	1,410,201	Illiquid	Illiquid
GBP-RON__1 week	11	0.17	58,617,452	901,807	Illiquid	Illiquid
GBP-RON__1 month	6	0.09	57,507,025	884,723	Illiquid	Illiquid
GBP-RON__3 months	11	0.17	27,582,580	424,347	Illiquid	Illiquid
GBP-RON__6 months	2	0.03	2,791,053	42,939	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-RON_1 year	1	0.02	103,148	1,587	Illiquid	Illiquid
GBP-RUB_<1 week	22	0.34	94,591,294	1,455,251	Illiquid	Illiquid
GBP-RUB_1 week	4	0.06	6,208,907	95,522	Illiquid	Illiquid
GBP-RUB_1 month	12	0.18	93,001,465	1,430,792	Illiquid	Illiquid
GBP-RUB_3 months	12	0.18	63,005,034	969,308	Illiquid	Illiquid
GBP-RUB_6 months	3	0.05	7,934,624	122,071	Illiquid	Illiquid
GBP-RUB_1 year	6	0.09	8,008,071	123,201	Illiquid	Illiquid
GBP-SAR_<1 week	11	0.17	81,745,363	1,257,621	Illiquid	Illiquid
GBP-SAR_1 week	5	0.08	41,028,314	631,205	Illiquid	Illiquid
GBP-SAR_1 month	10	0.15	48,584,119	747,448	Illiquid	Illiquid
GBP-SAR_3 months	7	0.11	22,213,363	341,744	Illiquid	Illiquid
GBP-SAR_6 months	4	0.06	1,932,665	29,733	Illiquid	Illiquid
GBP-SAR_1 year	1	0.02	5,285,444	81,315	Illiquid	Illiquid
GBP-SEK_<1 week	917	14.11	10,874,013,027	167,292,508	Illiquid	Illiquid
GBP-SEK_1 week	305	4.69	1,240,000,977	19,076,938	Illiquid	Illiquid
GBP-SEK_1 month	396	6.09	3,108,284,897	47,819,768	Illiquid	Illiquid
GBP-SEK_3 months	282	4.34	2,101,567,320	32,331,805	Illiquid	Illiquid
GBP-SEK_6 months	180	2.77	1,295,162,217	19,925,573	Illiquid	Illiquid
GBP-SEK_1 year	54	0.83	519,154,998	7,987,000	Illiquid	Illiquid
GBP-SEK_2 years	23	0.35	34,312,622	527,886	Illiquid	Illiquid
GBP-SEK_3 years	12	0.18	3,982,033	61,262	Illiquid	Illiquid
GBP-SEK_4 years	2	0.03	653,944	10,061	Illiquid	Illiquid
GBP-SGD_<1 week	350	5.38	424,423,119	6,529,586	Illiquid	Illiquid
GBP-SGD_1 week	137	2.11	76,172,901	1,171,891	Illiquid	Illiquid
GBP-SGD_1 month	122	1.88	670,817,117	10,320,263	Illiquid	Illiquid
GBP-SGD_3 months	52	0.80	271,879,256	4,182,758	Illiquid	Illiquid
GBP-SGD_6 months	75	1.15	245,569,149	3,777,987	Illiquid	Illiquid
GBP-SGD_1 year	19	0.29	28,758,643	442,441	Illiquid	Illiquid
GBP-SGD_2 years	15	0.23	44,037,325	677,497	Illiquid	Illiquid
GBP-THB_<1 week	30	0.46	41,677,798	641,197	Illiquid	Illiquid
GBP-THB_1 week	16	0.25	3,718,059	57,201	Illiquid	Illiquid
GBP-THB_1 month	34	0.52	58,915,570	906,393	Illiquid	Illiquid
GBP-THB_3 months	8	0.12	13,618,158	209,510	Illiquid	Illiquid
GBP-THB_6 months	2	0.03	765,475	11,777	Illiquid	Illiquid
GBP-THB_1 year	7	0.11	7,967,565	122,578	Illiquid	Illiquid
GBP-TND_<1 week	5	0.08	4,950,235	76,157	Illiquid	Illiquid
GBP-TND_1 month	1	0.02	45,455	699	Illiquid	Illiquid
GBP-TND_1 year	2	0.03	4,533,372	69,744	Illiquid	Illiquid
GBP-TRY_<1 week	96	1.48	142,278,480	2,188,900	Illiquid	Illiquid
GBP-TRY_1 week	43	0.66	95,169,576	1,464,147	Illiquid	Illiquid
GBP-TRY_1 month	32	0.49	52,155,827	802,397	Illiquid	Illiquid
GBP-TRY_3 months	34	0.52	111,006,563	1,707,793	Illiquid	Illiquid
GBP-TRY_6 months	2	0.03	10,844,132	166,833	Illiquid	Illiquid
GBP-TRY_1 year	2	0.03	28,525,621	438,856	Illiquid	Illiquid
GBP-TRY_3 years	1	0.02	1,061,195	16,326	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP-TWD_3 months	1	0.02	158,362	2,436	Illiquid	Illiquid
GBP-TZS <1 week	1	0.02	22,853	352	Illiquid	Illiquid
GBP-UGX <1 week	2	0.03	16,130	248	Illiquid	Illiquid
GBP-UGX_1 month	2	0.03	16,130	248	Illiquid	Illiquid
GBP-USD <1 week	18,894	290.68	1,395,064,487,244	21,462,530,573	Liquid	Liquid
GBP-USD_1 week	6,066	93.32	75,422,399,876	1,160,344,613	Liquid	Liquid
GBP-USD_1 month	8,814	135.60	123,300,697,768	1,896,933,812	Liquid	Liquid
GBP-USD_3 months	7,062	108.65	82,820,305,265	1,274,158,543	Liquid	Liquid
GBP-USD_6 months	7,062	108.65	65,908,673,277	1,013,979,589	Liquid	Liquid
GBP-USD_1 year	1,104	16.98	15,244,660,862	234,533,244	Illiquid	Illiquid
GBP-USD_2 years	473	7.28	2,758,486,883	42,438,260	Illiquid	Illiquid
GBP-USD_3 years	49	0.75	445,497,325	6,853,805	Illiquid	Illiquid
GBP-USD_4 years	3	0.05	14,009,084	215,524	Illiquid	Illiquid
GBP-USD_5 years	3	0.05	56,199,751	864,612	Illiquid	Illiquid
GBP-USD_6 years	2	0.03	154,236,010	2,372,862	Illiquid	Illiquid
GBP-ZAR <1 week	165	2.54	271,263,413	4,173,283	Illiquid	Illiquid
GBP-ZAR_1 week	105	1.62	131,050,724	2,016,165	Illiquid	Illiquid
GBP-ZAR_1 month	95	1.46	493,129,228	7,586,604	Illiquid	Illiquid
GBP-ZAR_3 months	50	0.77	402,765,293	6,196,389	Illiquid	Illiquid
GBP-ZAR_6 months	30	0.46	13,547,802	208,428	Illiquid	Illiquid
GBP-ZAR_1 year	38	0.58	7,208,700	110,903	Illiquid	Illiquid
GBP-ZAR_2 years	10	0.15	2,616,922	40,260	Illiquid	Illiquid
GBP-ZMW <1 week	1	0.02	344,334	5,297	Illiquid	Illiquid
HKD-BGN <1 week	1	0.02	1,525	23	Illiquid	Illiquid
HKD-CZK <1 week	1	0.02	1,729	27	Illiquid	Illiquid
HKD-DKK <1 week	11	0.17	73,632,877	1,132,813	Illiquid	Illiquid
HKD-DKK_1 week	5	0.08	1,005,273	15,466	Illiquid	Illiquid
HKD-DKK_1 month	5	0.08	1,965,406	30,237	Illiquid	Illiquid
HKD-DKK_3 months	3	0.05	11,791,006	181,400	Illiquid	Illiquid
HKD-DKK_6 months	4	0.06	117,528,469	1,808,130	Illiquid	Illiquid
HKD-DKK_1 year	1	0.02	233,763	3,596	Illiquid	Illiquid
HKD-INR_3 months	1	0.02	420,773	6,473	Illiquid	Illiquid
HKD-KRW <1 week	1	0.02	36,308,071	558,586	Illiquid	Illiquid
HKD-MXN <1 week	1	0.02	4,818	74	Illiquid	Illiquid
HKD-NOK <1 week	15	0.23	9,484,651	145,918	Illiquid	Illiquid
HKD-NOK_1 week	7	0.11	1,602,407	24,652	Illiquid	Illiquid
HKD-NOK_1 month	6	0.09	2,017,824	31,043	Illiquid	Illiquid
HKD-NOK_3 months	5	0.08	1,242,965	19,123	Illiquid	Illiquid
HKD-NOK_6 months	6	0.09	9,207,964	141,661	Illiquid	Illiquid
HKD-NOK_1 year	1	0.02	56,103	863	Illiquid	Illiquid
HKD-NZD <1 week	7	0.11	50,121,246	771,096	Illiquid	Illiquid
HKD-NZD_1 week	3	0.05	1,927,090	29,648	Illiquid	Illiquid
HKD-NZD_1 month	8	0.12	804,851	12,382	Illiquid	Illiquid
HKD-NZD_3 months	1	0.02	35,208	542	Illiquid	Illiquid
HKD-NZD_6 months	1	0.02	15,558	239	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
HKD-RUB <1 week	1	0.02	587	9	Illiquid	Illiquid
HKD-SEK <1 week	104	1.60	326,912,972	5,029,430	Illiquid	Illiquid
HKD-SEK 1 week	19	0.29	9,850,004	151,539	Illiquid	Illiquid
HKD-SEK 1 month	41	0.63	120,419,242	1,852,604	Illiquid	Illiquid
HKD-SEK 3 months	34	0.52	67,534,478	1,038,992	Illiquid	Illiquid
HKD-SEK 6 months	22	0.34	106,644,451	1,640,684	Illiquid	Illiquid
HKD-SEK 1 year	6	0.09	1,318,423	20,283	Illiquid	Illiquid
HKD-THB <1 week	1	0.02	638	10	Illiquid	Illiquid
HKD-THB 1 week	1	0.02	1,308	20	Illiquid	Illiquid
HKD-THB 1 month	1	0.02	44,739	688	Illiquid	Illiquid
HRK-CZK 1 week	9	0.14	63,804	982	Illiquid	Illiquid
HRK-CZK 1 month	1	0.02	35,797,324	550,728	Illiquid	Illiquid
HRK-SEK <1 week	13	0.20	12,799,229	196,911	Illiquid	Illiquid
HRK-SEK 1 week	7	0.11	120,237	1,850	Illiquid	Illiquid
HRK-SEK 1 month	16	0.25	1,949,491	29,992	Illiquid	Illiquid
HRK-SEK 3 months	10	0.15	1,510,121	23,233	Illiquid	Illiquid
HUF-DKK <1 week	3	0.05	3,145,051	48,385	Illiquid	Illiquid
HUF-DKK 1 month	2	0.03	9,053,090	139,278	Illiquid	Illiquid
HUF-DKK 1 year	1	0.02	121,208	1,865	Illiquid	Illiquid
HUF-NOK 1 week	1	0.02	383,666	5,903	Illiquid	Illiquid
HUF-NOK 1 year	1	0.02	136,506	2,100	Illiquid	Illiquid
HUF-SEK <1 week	20	0.31	26,033,438	400,514	Illiquid	Illiquid
HUF-SEK 1 week	5	0.08	30,798,550	473,824	Illiquid	Illiquid
HUF-SEK 1 month	17	0.26	7,146,911	109,952	Illiquid	Illiquid
HUF-SEK 3 months	25	0.38	92,619,466	1,424,915	Illiquid	Illiquid
HUF-SEK 6 months	11	0.17	14,557,234	223,957	Illiquid	Illiquid
HUF-SEK 1 year	1	0.02	165,766	2,550	Illiquid	Illiquid
HUF-TRY <1 week	5	0.08	6,139,037	94,447	Illiquid	Illiquid
HUF-TRY 1 month	1	0.02	3,379,603	51,994	Illiquid	Illiquid
HUF-TRY 3 months	3	0.05	2,811,782	43,258	Illiquid	Illiquid
IDR-HKD <1 week	1	0.02	70,322	1,082	Illiquid	Illiquid
ILS-DKK <1 week	2	0.03	438,567	6,747	Illiquid	Illiquid
ILS-DKK 3 months	1	0.02	6,263	96	Illiquid	Illiquid
ILS-DKK 6 months	1	0.02	1,363,338	20,974	Illiquid	Illiquid
ILS-NOK <1 week	2	0.03	110,928,427	1,706,591	Illiquid	Illiquid
ILS-NOK 1 week	1	0.02	411,715	6,334	Illiquid	Illiquid
ILS-NOK 1 month	1	0.02	411,715	6,334	Illiquid	Illiquid
ILS-NOK 3 months	3	0.05	906,943	13,953	Illiquid	Illiquid
ILS-PLN <1 week	2	0.03	261,444	4,022	Illiquid	Illiquid
ILS-PLN 1 month	3	0.05	249,219	3,834	Illiquid	Illiquid
ILS-PLN 3 months	1	0.02	44,927	691	Illiquid	Illiquid
ILS-SEK 1 week	3	0.05	1,091,211	16,788	Illiquid	Illiquid
ILS-SEK 1 month	2	0.03	2,087,806	32,120	Illiquid	Illiquid
JOD-ILS <1 week	1	0.02	21,509,399	330,914	Illiquid	Illiquid
JOD-ILS 1 week	10	0.15	166,441,775	2,560,643	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JOD-ILS__1 month	2	0.03	40,970,283	630,312	Illiquid	Illiquid
JPY-AED__<1 week	3	0.05	313,291	4,820	Illiquid	Illiquid
JPY-AED__1 week	5	0.08	42,248	650	Illiquid	Illiquid
JPY-AED__1 month	1	0.02	886,923	13,645	Illiquid	Illiquid
JPY-AED__3 months	1	0.02	75,099	1,155	Illiquid	Illiquid
JPY-BHD__6 months	1	0.02	90,611	1,394	Illiquid	Illiquid
JPY-BRL__<1 week	1	0.02	5,901	91	Illiquid	Illiquid
JPY-BRL__1 week	9	0.14	1,304,118	20,063	Illiquid	Illiquid
JPY-BRL__1 month	4	0.06	29,420,538	452,624	Illiquid	Illiquid
JPY-BRL__3 months	1	0.02	3,511,775	54,027	Illiquid	Illiquid
JPY-CNY__<1 week	82	1.26	438,073,950	6,739,599	Illiquid	Illiquid
JPY-CNY__1 week	27	0.42	45,820,547	704,931	Illiquid	Illiquid
JPY-CNY__1 month	10	0.15	84,466,732	1,299,488	Illiquid	Illiquid
JPY-CNY__3 months	1	0.02	18,852,189	290,034	Illiquid	Illiquid
JPY-CNY__6 months	4	0.06	1,905,917	29,322	Illiquid	Illiquid
JPY-CNY__1 year	6	0.09	40,599,247	624,604	Illiquid	Illiquid
JPY-CNY__2 years	1	0.02	185,634	2,856	Illiquid	Illiquid
JPY-CZK__<1 week	5	0.08	49,165	756	Illiquid	Illiquid
JPY-CZK__3 months	1	0.02	309,394	4,760	Illiquid	Illiquid
JPY-DKK__<1 week	126	1.94	1,054,101,837	16,216,951	Illiquid	Illiquid
JPY-DKK__1 week	38	0.58	275,893,566	4,244,516	Illiquid	Illiquid
JPY-DKK__1 month	97	1.49	567,533,434	8,731,284	Illiquid	Illiquid
JPY-DKK__3 months	30	0.46	335,454,269	5,160,835	Illiquid	Illiquid
JPY-DKK__6 months	16	0.25	222,819,166	3,427,987	Illiquid	Illiquid
JPY-DKK__1 year	4	0.06	8,815,119	135,617	Illiquid	Illiquid
JPY-DKK__2 years	4	0.06	23,059,986	354,769	Illiquid	Illiquid
JPY-HKD__<1 week	469	7.22	1,313,137,205	20,202,111	Illiquid	Illiquid
JPY-HKD__1 week	100	1.54	98,095,753	1,509,165	Illiquid	Illiquid
JPY-HKD__1 month	63	0.97	410,915,627	6,321,779	Illiquid	Illiquid
JPY-HKD__3 months	22	0.34	23,226,177	357,326	Illiquid	Illiquid
JPY-HKD__6 months	32	0.49	26,963,163	414,818	Illiquid	Illiquid
JPY-HKD__1 year	1	0.02	866,087	13,324	Illiquid	Illiquid
JPY-HUF__<1 week	25	0.38	3,674,715	56,534	Illiquid	Illiquid
JPY-HUF__1 week	3	0.05	31,253	481	Illiquid	Illiquid
JPY-HUF__1 month	18	0.28	6,258,810	96,289	Illiquid	Illiquid
JPY-HUF__3 months	2	0.03	234,675	3,610	Illiquid	Illiquid
JPY-IDR__1 week	1	0.02	2,442	38	Illiquid	Illiquid
JPY-ILS__<1 week	12	0.18	1,217,609	18,732	Illiquid	Illiquid
JPY-ILS__1 week	5	0.08	3,063,451	47,130	Illiquid	Illiquid
JPY-ILS__3 months	5	0.08	682,599	10,502	Illiquid	Illiquid
JPY-ILS__6 months	5	0.08	547,546	8,424	Illiquid	Illiquid
JPY-INR__<1 week	13	0.20	2,752,524	42,347	Illiquid	Illiquid
JPY-INR__1 week	8	0.12	368,258	5,666	Illiquid	Illiquid
JPY-INR__1 month	7	0.11	265,340	4,082	Illiquid	Illiquid
JPY-INR__3 months	8	0.12	188,902	2,906	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-INR_6 months	6	0.09	327,526	5,039	Illiquid	Illiquid
JPY-INR_4 years	1	0.02	9,237	142	Illiquid	Illiquid
JPY-INR_5 years	1	0.02	61,618	948	Illiquid	Illiquid
JPY-INR_6 years	1	0.02	21,388	329	Illiquid	Illiquid
JPY-KRW_<1 week	1	0.02	225,058	3,462	Illiquid	Illiquid
JPY-KRW_1 week	2	0.03	138,617	2,133	Illiquid	Illiquid
JPY-KRW_1 month	6	0.09	28,326,602	435,794	Illiquid	Illiquid
JPY-KWD_6 months	1	0.02	1,789,232	27,527	Illiquid	Illiquid
JPY-MXN_<1 week	94	1.45	251,172,361	3,864,190	Illiquid	Illiquid
JPY-MXN_1 week	54	0.83	519,186,630	7,987,487	Illiquid	Illiquid
JPY-MXN_1 month	49	0.75	496,540,955	7,639,092	Illiquid	Illiquid
JPY-MXN_3 months	13	0.20	55,101,733	847,719	Illiquid	Illiquid
JPY-MXN_6 months	11	0.17	38,235,276	588,235	Illiquid	Illiquid
JPY-MXN_1 year	1	0.02	1,776,008	27,323	Illiquid	Illiquid
JPY-NOK_<1 week	231	3.55	977,482,838	15,038,198	Illiquid	Illiquid
JPY-NOK_1 week	91	1.40	132,572,366	2,039,575	Illiquid	Illiquid
JPY-NOK_1 month	120	1.85	597,165,837	9,187,167	Illiquid	Illiquid
JPY-NOK_3 months	93	1.43	807,815,719	12,427,934	Illiquid	Illiquid
JPY-NOK_6 months	104	1.60	222,739,300	3,426,758	Illiquid	Illiquid
JPY-NOK_1 year	14	0.22	6,303,556	96,978	Illiquid	Illiquid
JPY-NOK_2 years	2	0.03	2,112,180	32,495	Illiquid	Illiquid
JPY-NOK_3 years	1	0.02	35,477	546	Illiquid	Illiquid
JPY-NOK_4 years	3	0.05	106,431	1,637	Illiquid	Illiquid
JPY-NZD_<1 week	1,894	29.14	31,673,096,446	487,278,407	Liquid	Illiquid
JPY-NZD_1 week	2,098	32.28	1,799,173,976	27,679,600	Illiquid	Illiquid
JPY-NZD_1 month	262	4.03	506,370,548	7,790,316	Illiquid	Illiquid
JPY-NZD_3 months	60	0.92	97,412,087	1,498,647	Illiquid	Illiquid
JPY-NZD_6 months	77	1.18	190,312,945	2,927,891	Illiquid	Illiquid
JPY-NZD_1 year	3	0.05	19,842,479	305,269	Illiquid	Illiquid
JPY-NZD_2 years	1	0.02	136,913	2,106	Illiquid	Illiquid
JPY-OMR_<1 week	1	0.02	903	14	Illiquid	Illiquid
JPY-OMR_1 week	1	0.02	2,012	31	Illiquid	Illiquid
JPY-PLN_<1 week	77	1.18	38,317,351	589,498	Illiquid	Illiquid
JPY-PLN_1 week	39	0.60	26,685,385	410,544	Illiquid	Illiquid
JPY-PLN_1 month	37	0.57	33,377,707	513,503	Illiquid	Illiquid
JPY-PLN_3 months	6	0.09	3,582,374	55,113	Illiquid	Illiquid
JPY-PLN_6 months	8	0.12	1,228,408	18,899	Illiquid	Illiquid
JPY-RON_1 month	2	0.03	46,533	716	Illiquid	Illiquid
JPY-RUB_<1 week	9	0.14	19,642,532	302,193	Illiquid	Illiquid
JPY-RUB_1 week	7	0.11	9,191,008	141,400	Illiquid	Illiquid
JPY-RUB_1 month	10	0.15	8,783,005	135,123	Illiquid	Illiquid
JPY-RUB_3 months	3	0.05	2,010,288	30,928	Illiquid	Illiquid
JPY-RUB_6 months	4	0.06	326,555	5,024	Illiquid	Illiquid
JPY-RUB_1 year	2	0.03	25,300	389	Illiquid	Illiquid
JPY-SAR_<1 week	1	0.02	10,180,814	156,628	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
JPY-SAR__1 week	1	0.02	10,180,888	156,629	Illiquid	Illiquid
JPY-SEK__<1 week	282	4.34	1,179,809,363	18,150,913	Illiquid	Illiquid
JPY-SEK__1 week	113	1.74	124,302,967	1,912,353	Illiquid	Illiquid
JPY-SEK__1 month	180	2.77	609,255,211	9,373,157	Illiquid	Illiquid
JPY-SEK__3 months	100	1.54	461,405,804	7,098,551	Illiquid	Illiquid
JPY-SEK__6 months	86	1.32	357,861,845	5,505,567	Illiquid	Illiquid
JPY-SEK__1 year	6	0.09	8,315,101	127,925	Illiquid	Illiquid
JPY-SEK__2 years	1	0.02	1,260,991	19,400	Illiquid	Illiquid
JPY-SGD__<1 week	291	4.48	349,041,408	5,369,868	Illiquid	Illiquid
JPY-SGD__1 week	94	1.45	45,156,267	694,712	Illiquid	Illiquid
JPY-SGD__1 month	101	1.55	162,560,893	2,500,937	Illiquid	Illiquid
JPY-SGD__3 months	45	0.69	111,770,648	1,719,548	Illiquid	Illiquid
JPY-SGD__6 months	17	0.26	10,364,314	159,451	Illiquid	Illiquid
JPY-SGD__1 year	1	0.02	177,385	2,729	Illiquid	Illiquid
JPY-THB__<1 week	12	0.18	3,313,705	50,980	Illiquid	Illiquid
JPY-THB__1 week	9	0.14	163,194	2,511	Illiquid	Illiquid
JPY-THB__1 month	4	0.06	106,466	1,638	Illiquid	Illiquid
JPY-THB__3 months	4	0.06	4,839,632	74,456	Illiquid	Illiquid
JPY-THB__6 months	2	0.03	314,993	4,846	Illiquid	Illiquid
JPY-THB__1 year	3	0.05	801,778	12,335	Illiquid	Illiquid
JPY-TRY__<1 week	97	1.49	648,084,045	9,970,524	Illiquid	Illiquid
JPY-TRY__1 week	26	0.40	78,287,197	1,204,418	Illiquid	Illiquid
JPY-TRY__1 month	18	0.28	13,415,074	206,386	Illiquid	Illiquid
JPY-TRY__3 months	8	0.12	10,149,251	156,142	Illiquid	Illiquid
JPY-TRY__6 months	21	0.32	30,524,560	469,609	Illiquid	Illiquid
JPY-TWD__3 months	1	0.02	796,080	12,247	Illiquid	Illiquid
JPY-ZAR__<1 week	510	7.85	7,994,421,101	122,991,094	Illiquid	Illiquid
JPY-ZAR__1 week	125	1.92	1,774,705,673	27,303,164	Illiquid	Illiquid
JPY-ZAR__1 month	37	0.57	212,365,988	3,267,169	Illiquid	Illiquid
JPY-ZAR__3 months	27	0.42	53,010,585	815,547	Illiquid	Illiquid
JPY-ZAR__6 months	4	0.06	28,173	433	Illiquid	Illiquid
JPY-ZMW__2 years	1	0.02	344,334	5,297	Illiquid	Illiquid
KRW-DKK__3 months	1	0.02	547,538	8,424	Illiquid	Illiquid
KRW-DKK__1 year	1	0.02	277,234	4,265	Illiquid	Illiquid
KRW-DKK__2 years	2	0.03	831,703	12,795	Illiquid	Illiquid
KRW-KWD__1 week	4	0.06	82,925	1,276	Illiquid	Illiquid
KRW-KWD__3 months	2	0.03	63,356	975	Illiquid	Illiquid
KRW-KWD__6 months	2	0.03	31,128	479	Illiquid	Illiquid
KRW-KWD__1 year	2	0.03	18,934	291	Illiquid	Illiquid
KRW-SGD__1 month	1	0.02	460,143	7,079	Illiquid	Illiquid
KWD-AED__<1 week	4	0.06	618,682	9,518	Illiquid	Illiquid
KWD-AED__1 week	5	0.08	214,526	3,300	Illiquid	Illiquid
KWD-AED__1 month	1	0.02	197,371	3,036	Illiquid	Illiquid
KWD-NOK__<1 week	2	0.03	5,152,575	79,270	Illiquid	Illiquid
KWD-NOK__3 months	1	0.02	2,576,288	39,635	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
KWD-OMR_1 week	1	0.02	1,288	20	Illiquid	Illiquid
KWD-SEK_1 week	1	0.02	1,378,314	21,205	Illiquid	Illiquid
KWD-SEK_3 months	1	0.02	1,378,314	21,205	Illiquid	Illiquid
LTL-DKK_<1 week	1	0.02	550,221	8,465	Illiquid	Illiquid
LTL-DKK_1 month	1	0.02	86,877	1,337	Illiquid	Illiquid
LTL-SEK_<1 week	12	0.18	27,067,032	416,416	Illiquid	Illiquid
LTL-SEK_1 week	4	0.06	6,159,286	94,758	Illiquid	Illiquid
LTL-SEK_1 month	27	0.42	110,558,830	1,700,905	Illiquid	Illiquid
LTL-SEK_3 months	10	0.15	4,445,202	68,388	Illiquid	Illiquid
LTL-SEK_6 months	2	0.03	2,988,192	45,972	Illiquid	Illiquid
MXN-DKK_<1 week	5	0.08	12,909,359	198,606	Illiquid	Illiquid
MXN-DKK_3 months	3	0.05	502,794	7,735	Illiquid	Illiquid
MXN-DKK_1 year	1	0.02	5,550,025	85,385	Illiquid	Illiquid
MXN-SEK_<1 week	21	0.32	18,486,196	284,403	Illiquid	Illiquid
MXN-SEK_1 week	3	0.05	2,175,610	33,471	Illiquid	Illiquid
MXN-SEK_1 month	11	0.17	5,923,896	91,137	Illiquid	Illiquid
MXN-SEK_3 months	5	0.08	5,272,193	81,111	Illiquid	Illiquid
MXN-SEK_6 months	1	0.02	13,875,064	213,463	Illiquid	Illiquid
MXN-SEK_1 year	8	0.12	2,528,505	38,900	Illiquid	Illiquid
MYR-DKK_3 months	1	0.02	1,559,219	23,988	Illiquid	Illiquid
MYR-NOK_1 week	1	0.02	113,549	1,747	Illiquid	Illiquid
MYR-USD_1 week	2	0.03	10,054	155	Illiquid	Illiquid
MYR-ZAR_1 week	1	0.02	1,559,219	23,988	Illiquid	Illiquid
NOK-DKK_<1 week	125	1.92	673,200,436	10,356,930	Illiquid	Illiquid
NOK-DKK_1 week	65	1.00	233,020,273	3,584,927	Illiquid	Illiquid
NOK-DKK_1 month	73	1.12	127,419,333	1,960,297	Illiquid	Illiquid
NOK-DKK_3 months	90	1.38	446,821,470	6,874,176	Illiquid	Illiquid
NOK-DKK_6 months	59	0.91	267,844,402	4,120,683	Illiquid	Illiquid
NOK-DKK_1 year	28	0.43	60,210,712	926,319	Illiquid	Illiquid
NOK-DKK_2 years	1	0.02	105,848	1,628	Illiquid	Illiquid
NOK-DKK_3 years	2	0.03	174,365	2,683	Illiquid	Illiquid
NOK-DKK_4 years	4	0.06	320,272	4,927	Illiquid	Illiquid
NOK-MXN_<1 week	1	0.02	921,304	14,174	Illiquid	Illiquid
NOK-OMR_1 week	1	0.02	5,048	78	Illiquid	Illiquid
NOK-RUB_<1 week	2	0.03	1,089,787	16,766	Illiquid	Illiquid
NOK-RUB_1 week	2	0.03	1,067,335	16,421	Illiquid	Illiquid
NOK-RUB_6 months	1	0.02	1,089,257	16,758	Illiquid	Illiquid
NOK-SAR_<1 week	2	0.03	110,539	1,701	Illiquid	Illiquid
NOK-SAR_3 months	2	0.03	110,539	1,701	Illiquid	Illiquid
NOK-SEK_<1 week	1,188	18.28	5,713,647,709	87,902,272	Illiquid	Illiquid
NOK-SEK_1 week	214	3.29	809,912,465	12,460,192	Illiquid	Illiquid
NOK-SEK_1 month	495	7.62	3,259,581,335	50,147,405	Illiquid	Illiquid
NOK-SEK_3 months	484	7.45	2,280,684,043	35,087,447	Illiquid	Illiquid
NOK-SEK_6 months	287	4.42	1,702,492,185	26,192,187	Illiquid	Illiquid
NOK-SEK_1 year	40	0.62	60,234,322	926,682	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
NOK-SEK__2 years	7	0.11	2,601,032	40,016	Illiquid	Illiquid
NOK-SEK__3 years	5	0.08	36,154,386	556,221	Illiquid	Illiquid
NOK-SEK__4 years	2	0.03	33,424	514	Illiquid	Illiquid
NOK-ZAR__<1 week	12	0.18	5,507,182	84,726	Illiquid	Illiquid
NOK-ZAR__1 week	5	0.08	1,728,174	26,587	Illiquid	Illiquid
NOK-ZAR__1 month	2	0.03	2,429,977	37,384	Illiquid	Illiquid
NOK-ZAR__3 months	2	0.03	2,847,278	43,804	Illiquid	Illiquid
NOK-ZAR__6 months	1	0.02	1,742,023	26,800	Illiquid	Illiquid
NZD-DKK__<1 week	5	0.08	2,762,469	42,500	Illiquid	Illiquid
NZD-DKK__1 week	5	0.08	1,186,466	18,253	Illiquid	Illiquid
NZD-DKK__1 month	4	0.06	306,628	4,717	Illiquid	Illiquid
NZD-DKK__3 months	4	0.06	2,945,750	45,319	Illiquid	Illiquid
NZD-DKK__6 months	1	0.02	99,159	1,526	Illiquid	Illiquid
NZD-HUF__<1 week	13	0.20	2,370,469	36,469	Illiquid	Illiquid
NZD-HUF__1 week	1	0.02	622	10	Illiquid	Illiquid
NZD-MXN__<1 week	6	0.09	59,482,882	915,121	Illiquid	Illiquid
NZD-MXN__1 week	3	0.05	5,242,443	80,653	Illiquid	Illiquid
NZD-MXN__1 month	17	0.26	42,708,329	657,051	Illiquid	Illiquid
NZD-MXN__3 months	12	0.18	15,369,735	236,457	Illiquid	Illiquid
NZD-MXN__6 months	24	0.37	9,203,694	141,595	Illiquid	Illiquid
NZD-MXN__2 years	2	0.03	222,001	3,415	Illiquid	Illiquid
NZD-NOK__<1 week	8	0.12	76,025,518	1,169,623	Illiquid	Illiquid
NZD-NOK__1 week	9	0.14	49,337,292	759,035	Illiquid	Illiquid
NZD-NOK__1 month	18	0.28	48,925,483	752,700	Illiquid	Illiquid
NZD-NOK__3 months	18	0.28	93,543,585	1,439,132	Illiquid	Illiquid
NZD-NOK__6 months	3	0.05	748,586	11,517	Illiquid	Illiquid
NZD-PLN__<1 week	1	0.02	49,787	766	Illiquid	Illiquid
NZD-PLN__1 month	1	0.02	49,787	766	Illiquid	Illiquid
NZD-SEK__<1 week	24	0.37	273,330,801	4,205,089	Illiquid	Illiquid
NZD-SEK__1 week	4	0.06	3,496,914	53,799	Illiquid	Illiquid
NZD-SEK__1 month	14	0.22	20,484,982	315,154	Illiquid	Illiquid
NZD-SEK__3 months	21	0.32	15,128,072	232,740	Illiquid	Illiquid
NZD-SEK__6 months	2	0.03	1,816,176	27,941	Illiquid	Illiquid
NZD-SGD__<1 week	177	2.72	73,219,244	1,126,450	Illiquid	Illiquid
NZD-SGD__1 week	37	0.57	19,973,279	307,281	Illiquid	Illiquid
NZD-SGD__1 month	46	0.71	156,166,940	2,402,568	Illiquid	Illiquid
NZD-SGD__3 months	1	0.02	448,943	6,907	Illiquid	Illiquid
NZD-SGD__6 months	2	0.03	3,858,469	59,361	Illiquid	Illiquid
NZD-THB__6 months	1	0.02	161,062	2,478	Illiquid	Illiquid
NZD-THB__1 year	1	0.02	82,912	1,276	Illiquid	Illiquid
NZD-ZAR__<1 week	6	0.09	131,343,538	2,020,670	Illiquid	Illiquid
NZD-ZAR__1 week	2	0.03	2,519,422	38,760	Illiquid	Illiquid
NZD-ZAR__1 month	16	0.25	11,730,991	180,477	Illiquid	Illiquid
NZD-ZAR__3 months	3	0.05	581,311	8,943	Illiquid	Illiquid
OMR-DKK__<1 week	1	0.02	746	11	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
OMR-SEK__1 week	2	0.03	2,001	31	Illiquid	Illiquid
OMR-SGD__<1 week	1	0.02	928	14	Illiquid	Illiquid
OMR-SGD__1 week	1	0.02	868	13	Illiquid	Illiquid
PHP-DKK__<1 week	1	0.02	1,224,244	18,835	Illiquid	Illiquid
PHP-DKK__3 months	1	0.02	1,224,244	18,835	Illiquid	Illiquid
PHP-DKK__1 year	1	0.02	179,556	2,762	Illiquid	Illiquid
PLN-AED__<1 week	3	0.05	93,370	1,436	Illiquid	Illiquid
PLN-AED__1 week	3	0.05	7,223	111	Illiquid	Illiquid
PLN-CZK__<1 week	21	0.32	43,626,066	671,170	Illiquid	Illiquid
PLN-CZK__1 week	7	0.11	943,137	14,510	Illiquid	Illiquid
PLN-CZK__1 month	22	0.34	10,693,714	164,519	Illiquid	Illiquid
PLN-CZK__3 months	12	0.18	77,189,335	1,187,528	Illiquid	Illiquid
PLN-CZK__1 year	6	0.09	3,852,544	59,270	Illiquid	Illiquid
PLN-CZK__2 years	1	0.02	182,301	2,805	Illiquid	Illiquid
PLN-DKK__<1 week	16	0.25	35,253,251	542,358	Illiquid	Illiquid
PLN-DKK__1 week	9	0.14	7,552,992	116,200	Illiquid	Illiquid
PLN-DKK__1 month	8	0.12	15,677,842	241,198	Illiquid	Illiquid
PLN-DKK__3 months	7	0.11	41,307,932	635,507	Illiquid	Illiquid
PLN-DKK__6 months	4	0.06	127,287,853	1,958,275	Illiquid	Illiquid
PLN-DKK__1 year	5	0.08	718,804	11,059	Illiquid	Illiquid
PLN-DKK__2 years	4	0.06	550,807	8,474	Illiquid	Illiquid
PLN-HKD__<1 week	3	0.05	2,741	42	Illiquid	Illiquid
PLN-HUF__<1 week	8	0.12	11,257,310	173,189	Illiquid	Illiquid
PLN-HUF__1 week	5	0.08	648,687	9,980	Illiquid	Illiquid
PLN-HUF__1 month	6	0.09	12,015,990	184,861	Illiquid	Illiquid
PLN-HUF__3 months	2	0.03	47,755,087	734,694	Illiquid	Illiquid
PLN-HUF__6 months	1	0.02	88,851	1,367	Illiquid	Illiquid
PLN-HUF__1 year	1	0.02	23,093	355	Illiquid	Illiquid
PLN-NOK__<1 week	14	0.22	11,038,286	169,820	Illiquid	Illiquid
PLN-NOK__1 week	5	0.08	1,743,335	26,821	Illiquid	Illiquid
PLN-NOK__1 month	7	0.11	9,325,894	143,475	Illiquid	Illiquid
PLN-NOK__3 months	7	0.11	3,535,315	54,389	Illiquid	Illiquid
PLN-NOK__6 months	1	0.02	1,671,428	25,714	Illiquid	Illiquid
PLN-NOK__1 year	7	0.11	728,993	11,215	Illiquid	Illiquid
PLN-SEK__<1 week	106	1.63	296,151,407	4,556,175	Illiquid	Illiquid
PLN-SEK__1 week	28	0.43	153,444,264	2,360,681	Illiquid	Illiquid
PLN-SEK__1 month	81	1.25	309,873,696	4,767,288	Illiquid	Illiquid
PLN-SEK__3 months	43	0.66	157,695,653	2,426,087	Illiquid	Illiquid
PLN-SEK__6 months	18	0.28	27,598,541	424,593	Illiquid	Illiquid
PLN-SEK__1 year	22	0.34	6,934,643	106,687	Illiquid	Illiquid
PLN-THB__1 week	1	0.02	696	11	Illiquid	Illiquid
PLN-THB__1 month	4	0.06	145,179	2,234	Illiquid	Illiquid
PLN-THB__3 months	1	0.02	30,870	475	Illiquid	Illiquid
PLN-TRY__<1 week	1	0.02	69,245	1,065	Illiquid	Illiquid
PLN-TRY__1 week	4	0.06	1,195,901	18,398	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
PLN-TRY__1 month	6	0.09	1,036,045	15,939	Illiquid	Illiquid
PLN-TRY__3 months	1	0.02	302,767	4,658	Illiquid	Illiquid
PLN-TRY__1 year	3	0.05	367,475	5,653	Illiquid	Illiquid
PLN-TRY__2 years	3	0.05	367,475	5,653	Illiquid	Illiquid
QAR-DKK__<1 week	1	0.02	1,394,232	21,450	Illiquid	Illiquid
QAR-DKK__3 months	1	0.02	1,394,232	21,450	Illiquid	Illiquid
RON-DKK__<1 week	3	0.05	1,132,387	17,421	Illiquid	Illiquid
RON-DKK__1 week	1	0.02	440,426	6,776	Illiquid	Illiquid
RON-DKK__3 months	1	0.02	4,240	65	Illiquid	Illiquid
RON-HUF__1 week	3	0.05	300,141	4,618	Illiquid	Illiquid
RON-HUF__1 month	3	0.05	147,994	2,277	Illiquid	Illiquid
RON-HUF__6 months	4	0.06	746,445	11,484	Illiquid	Illiquid
RON-HUF__1 year	2	0.03	906,755	13,950	Illiquid	Illiquid
RON-PLN__<1 week	6	0.09	2,721,164	41,864	Illiquid	Illiquid
RON-PLN__1 week	1	0.02	225,427	3,468	Illiquid	Illiquid
RON-PLN__1 month	3	0.05	741,988	11,415	Illiquid	Illiquid
RON-PLN__3 months	1	0.02	216,004	3,323	Illiquid	Illiquid
RON-PLN__1 year	1	0.02	607,208	9,342	Illiquid	Illiquid
RON-SEK__<1 week	12	0.18	22,198,791	341,520	Illiquid	Illiquid
RON-SEK__1 month	8	0.12	5,698,728	87,673	Illiquid	Illiquid
RON-SEK__3 months	7	0.11	1,222,140	18,802	Illiquid	Illiquid
RON-SEK__6 months	2	0.03	6,144,009	94,523	Illiquid	Illiquid
RON-SEK__1 year	1	0.02	18,564	286	Illiquid	Illiquid
RUB-CZK__1 month	1	0.02	93,066	1,432	Illiquid	Illiquid
RUB-CZK__3 months	2	0.03	244,777	3,766	Illiquid	Illiquid
RUB-DKK__<1 week	13	0.20	10,324,591	158,840	Illiquid	Illiquid
RUB-DKK__1 week	1	0.02	653	10	Illiquid	Illiquid
RUB-DKK__1 month	2	0.03	7,574,502	116,531	Illiquid	Illiquid
RUB-DKK__3 months	6	0.09	9,540,267	146,773	Illiquid	Illiquid
RUB-HUF__3 months	1	0.02	609,093	9,371	Illiquid	Illiquid
RUB-HUF__1 year	1	0.02	277,819	4,274	Illiquid	Illiquid
RUB-LTL__<1 week	1	0.02	63,485	977	Illiquid	Illiquid
RUB-LTL__1 month	3	0.05	83,152	1,279	Illiquid	Illiquid
RUB-PLN__<1 week	2	0.03	4,039,834	62,151	Illiquid	Illiquid
RUB-PLN__1 month	2	0.03	1,631,846	25,105	Illiquid	Illiquid
RUB-PLN__3 months	2	0.03	6,818,381	104,898	Illiquid	Illiquid
RUB-PLN__1 year	1	0.02	196,362	3,021	Illiquid	Illiquid
RUB-SEK__<1 week	13	0.20	85,956,362	1,322,406	Illiquid	Illiquid
RUB-SEK__1 week	4	0.06	32,024,969	492,692	Illiquid	Illiquid
RUB-SEK__1 month	18	0.28	55,297,400	850,729	Illiquid	Illiquid
RUB-SEK__3 months	25	0.38	337,414,669	5,190,995	Illiquid	Illiquid
RUB-SEK__6 months	5	0.08	12,905,470	198,546	Illiquid	Illiquid
RUB-SEK__1 year	10	0.15	84,398,181	1,298,434	Illiquid	Illiquid
RUB-SEK__2 years	1	0.02	8,526,393	131,175	Illiquid	Illiquid
SAR-AED__<1 week	1	0.02	1,048,307	16,128	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
SAR-AED_1 week	1	0.02	8,744	135	Illiquid	Illiquid
SAR-DKK_<1 week	1	0.02	2,907,395	44,729	Illiquid	Illiquid
SAR-DKK_3 months	1	0.02	4,834,401	74,375	Illiquid	Illiquid
SAR-DKK_6 months	3	0.05	14,503,202	223,126	Illiquid	Illiquid
SAR-SEK_<1 week	4	0.06	1,514,837	23,305	Illiquid	Illiquid
SAR-SEK_1 week	2	0.03	157,269	2,420	Illiquid	Illiquid
SAR-SEK_1 month	6	0.09	6,636,827	102,105	Illiquid	Illiquid
SAR-SGD_<1 week	1	0.02	28,619,652	440,302	Illiquid	Illiquid
SEK-BGN_<1 week	1	0.02	352,771	5,427	Illiquid	Illiquid
SEK-BGN_1 month	1	0.02	352,771	5,427	Illiquid	Illiquid
SEK-BGN_3 months	1	0.02	385,367	5,929	Illiquid	Illiquid
SEK-DKK_<1 week	464	7.14	1,547,332,903	23,805,122	Illiquid	Illiquid
SEK-DKK_1 week	111	1.71	234,077,826	3,601,197	Illiquid	Illiquid
SEK-DKK_1 month	272	4.18	936,631,612	14,409,717	Illiquid	Illiquid
SEK-DKK_3 months	137	2.11	902,236,995	13,880,569	Illiquid	Illiquid
SEK-DKK_6 months	33	0.51	540,836,377	8,320,560	Illiquid	Illiquid
SEK-DKK_1 year	22	0.34	397,934,060	6,122,062	Illiquid	Illiquid
SEK-DKK_2 years	2	0.03	26,562,487	408,654	Illiquid	Illiquid
SEK-INR_1 month	1	0.02	67,792	1,043	Illiquid	Illiquid
SEK-INR_3 months	1	0.02	148,420	2,283	Illiquid	Illiquid
SEK-INR_6 months	1	0.02	10,216	157	Illiquid	Illiquid
SGD-CNY_<1 week	39	0.60	117,537,816	1,808,274	Illiquid	Illiquid
SGD-CNY_1 week	9	0.14	9,336,287	143,635	Illiquid	Illiquid
SGD-CNY_1 month	13	0.20	66,768,656	1,027,210	Illiquid	Illiquid
SGD-CNY_3 months	3	0.05	9,271,869	142,644	Illiquid	Illiquid
SGD-CNY_6 months	1	0.02	5,764,048	88,678	Illiquid	Illiquid
SGD-CNY_1 year	1	0.02	39,112	602	Illiquid	Illiquid
SGD-CNY_2 years	2	0.03	4,158,196	63,972	Illiquid	Illiquid
SGD-DKK_<1 week	7	0.11	31,130,129	478,925	Illiquid	Illiquid
SGD-DKK_1 week	10	0.15	3,327,803	51,197	Illiquid	Illiquid
SGD-DKK_1 month	5	0.08	17,092,078	262,955	Illiquid	Illiquid
SGD-DKK_3 months	4	0.06	11,416,271	175,635	Illiquid	Illiquid
SGD-DKK_6 months	3	0.05	916,484	14,100	Illiquid	Illiquid
SGD-DKK_1 year	3	0.05	437,333	6,728	Illiquid	Illiquid
SGD-HKD_<1 week	27	0.42	17,157,678	263,964	Illiquid	Illiquid
SGD-HKD_1 week	11	0.17	1,085,974	16,707	Illiquid	Illiquid
SGD-HKD_1 month	17	0.26	9,692,458	149,115	Illiquid	Illiquid
SGD-HKD_3 months	5	0.08	1,818,912	27,983	Illiquid	Illiquid
SGD-HKD_6 months	1	0.02	1,694,630	26,071	Illiquid	Illiquid
SGD-HKD_1 year	2	0.03	148,767	2,289	Illiquid	Illiquid
SGD-HKD_2 years	5	0.08	1,100,863	16,936	Illiquid	Illiquid
SGD-HUF_1 month	1	0.02	570,378	8,775	Illiquid	Illiquid
SGD-IDR_<1 week	10	0.15	1,386,005	21,323	Illiquid	Illiquid
SGD-IDR_1 week	5	0.08	110,921	1,706	Illiquid	Illiquid
SGD-IDR_3 months	2	0.03	57,640	887	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
SGD-IDR_6 months	2	0.03	57,640	887	Illiquid	Illiquid
SGD-IDR_1 year	1	0.02	28,820	443	Illiquid	Illiquid
SGD-ILS_<1 week	1	0.02	15,304	235	Illiquid	Illiquid
SGD-ILS_1 week	4	0.06	173,193	2,665	Illiquid	Illiquid
SGD-ILS_1 month	1	0.02	77,875	1,198	Illiquid	Illiquid
SGD-ILS_3 months	1	0.02	15,068	232	Illiquid	Illiquid
SGD-INR_<1 week	3	0.05	84,414	1,299	Illiquid	Illiquid
SGD-NOK_<1 week	11	0.17	8,083,488	124,361	Illiquid	Illiquid
SGD-NOK_1 week	6	0.09	38,359	590	Illiquid	Illiquid
SGD-NOK_1 month	2	0.03	7,291,520	112,177	Illiquid	Illiquid
SGD-NOK_3 months	6	0.09	13,603,729	209,288	Illiquid	Illiquid
SGD-NOK_6 months	3	0.05	4,196,635	64,564	Illiquid	Illiquid
SGD-PLN_<1 week	2	0.03	4,336	67	Illiquid	Illiquid
SGD-SEK_<1 week	44	0.68	71,488,724	1,099,827	Illiquid	Illiquid
SGD-SEK_1 week	13	0.20	4,302,564	66,193	Illiquid	Illiquid
SGD-SEK_1 month	26	0.40	13,232,443	203,576	Illiquid	Illiquid
SGD-SEK_3 months	28	0.43	125,756,445	1,934,715	Illiquid	Illiquid
SGD-SEK_6 months	6	0.09	13,067,482	201,038	Illiquid	Illiquid
SGD-SEK_1 year	4	0.06	32,332,036	497,416	Illiquid	Illiquid
SGD-SEK_2 years	1	0.02	589,695	9,072	Illiquid	Illiquid
SGD-THB_<1 week	6	0.09	7,009	108	Illiquid	Illiquid
SGD-THB_1 week	8	0.12	222,705	3,426	Illiquid	Illiquid
SGD-THB_1 month	11	0.17	51,626,273	794,250	Illiquid	Illiquid
SGD-THB_3 months	7	0.11	5,266,254	81,019	Illiquid	Illiquid
SGD-THB_6 months	1	0.02	3,377,825	51,967	Illiquid	Illiquid
SGD-VND_1 month	2	0.03	2,669,436	41,068	Illiquid	Illiquid
SGD-ZAR_<1 week	3	0.05	43,987,648	676,733	Illiquid	Illiquid
SGD-ZAR_1 week	5	0.08	171,781	2,643	Illiquid	Illiquid
SGD-ZAR_3 months	1	0.02	4,115	63	Illiquid	Illiquid
SGD-ZAR_1 year	2	0.03	392,407	6,037	Illiquid	Illiquid
THB-DKK_<1 week	10	0.15	6,878,553	105,824	Illiquid	Illiquid
THB-DKK_1 week	2	0.03	57,702	888	Illiquid	Illiquid
THB-DKK_1 month	3	0.05	2,646,840	40,721	Illiquid	Illiquid
THB-DKK_3 months	2	0.03	3,802,849	58,505	Illiquid	Illiquid
THB-DKK_6 months	2	0.03	1,941,690	29,872	Illiquid	Illiquid
THB-DKK_1 year	4	0.06	782,940	12,045	Illiquid	Illiquid
THB-DKK_2 years	1	0.02	111,849	1,721	Illiquid	Illiquid
THB-INR_<1 week	2	0.03	3,505	54	Illiquid	Illiquid
THB-INR_3 months	1	0.02	2,135	33	Illiquid	Illiquid
THB-NOK_<1 week	5	0.08	86,983	1,338	Illiquid	Illiquid
THB-NOK_1 week	2	0.03	4,629	71	Illiquid	Illiquid
THB-NOK_1 month	1	0.02	2,572,516	39,577	Illiquid	Illiquid
THB-NOK_6 months	1	0.02	73,932	1,137	Illiquid	Illiquid
THB-PHP_1 month	1	0.02	5,642	87	Illiquid	Illiquid
THB-SEK_<1 week	75	1.15	119,180,177	1,833,541	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
THB-SEK__1 week	27	0.42	54,731,100	842,017	Illiquid	Illiquid
THB-SEK__1 month	16	0.25	26,213,344	403,282	Illiquid	Illiquid
THB-SEK__3 months	14	0.22	45,080,601	693,548	Illiquid	Illiquid
THB-SEK__6 months	4	0.06	821,375	12,637	Illiquid	Illiquid
THB-SEK__1 year	2	0.03	733,161	11,279	Illiquid	Illiquid
TRY-DKK__<1 week	15	0.23	10,779,407	165,837	Illiquid	Illiquid
TRY-DKK__1 week	8	0.12	3,408,784	52,443	Illiquid	Illiquid
TRY-DKK__1 month	2	0.03	2,822,348	43,421	Illiquid	Illiquid
TRY-DKK__3 months	23	0.35	12,185,413	187,468	Illiquid	Illiquid
TRY-DKK__6 months	24	0.37	4,633,618	71,286	Illiquid	Illiquid
TRY-DKK__1 year	5	0.08	690,434	10,622	Illiquid	Illiquid
TRY-HKD__<1 week	1	0.02	5,307	82	Illiquid	Illiquid
TRY-MXN__<1 week	1	0.02	4,565	70	Illiquid	Illiquid
TRY-NOK__1 week	3	0.05	2,584,720	39,765	Illiquid	Illiquid
TRY-NOK__1 month	2	0.03	212,239	3,265	Illiquid	Illiquid
TRY-NOK__3 months	2	0.03	370,404	5,699	Illiquid	Illiquid
TRY-RUB__<1 week	1	0.02	6,891,681	106,026	Illiquid	Illiquid
TRY-SEK__<1 week	13	0.20	17,429,521	268,146	Illiquid	Illiquid
TRY-SEK__1 week	1	0.02	417,043	6,416	Illiquid	Illiquid
TRY-SEK__1 month	12	0.18	17,577,973	270,430	Illiquid	Illiquid
TRY-SEK__3 months	7	0.11	13,811,842	212,490	Illiquid	Illiquid
TRY-SEK__6 months	4	0.06	10,649,525	163,839	Illiquid	Illiquid
TRY-ZAR__<1 week	5	0.08	2,253,793	34,674	Illiquid	Illiquid
TRY-ZAR__1 week	1	0.02	43,935	676	Illiquid	Illiquid
TRY-ZAR__1 month	1	0.02	33,796	520	Illiquid	Illiquid
TRY-ZAR__3 months	4	0.06	155,580	2,394	Illiquid	Illiquid
TRY-ZAR__6 months	20	0.31	841,468	12,946	Illiquid	Illiquid
USD-AED__<1 week	445	6.85	4,259,335,043	65,528,231	Illiquid	Illiquid
USD-AED__1 week	176	2.71	1,865,834,216	28,705,142	Illiquid	Illiquid
USD-AED__1 month	166	2.55	1,577,012,988	24,261,738	Illiquid	Illiquid
USD-AED__3 months	71	1.09	1,079,618,531	16,609,516	Illiquid	Illiquid
USD-AED__6 months	35	0.54	501,462,427	7,714,807	Illiquid	Illiquid
USD-AED__1 year	15	0.23	290,211,192	4,464,788	Illiquid	Illiquid
USD-AED__2 years	6	0.09	90,657,008	1,394,723	Illiquid	Illiquid
USD-BDT__1 week	2	0.03	3,072,838	47,274	Illiquid	Illiquid
USD-BDT__3 months	1	0.02	127,496	1,961	Illiquid	Illiquid
USD-BGN__<1 week	10	0.15	23,663,996	364,061	Illiquid	Illiquid
USD-BGN__1 week	3	0.05	5,307	82	Illiquid	Illiquid
USD-BGN__1 month	1	0.02	431,793	6,643	Illiquid	Illiquid
USD-BGN__3 months	10	0.15	55,774,593	858,071	Illiquid	Illiquid
USD-BHD__<1 week	63	0.97	272,686,720	4,195,180	Illiquid	Illiquid
USD-BHD__1 week	18	0.28	47,883,669	736,672	Illiquid	Illiquid
USD-BHD__1 month	8	0.12	25,969,146	399,525	Illiquid	Illiquid
USD-BHD__3 months	7	0.11	29,004,008	446,216	Illiquid	Illiquid
USD-BHD__6 months	1	0.02	504,297	7,758	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-BHD_1 year	1	0.02	1,248,481	19,207	Illiquid	Illiquid
USD-BHD_2 years	2	0.03	18,490,533	284,470	Illiquid	Illiquid
USD-BRL_<1 week	30	0.46	39,137,120	602,110	Illiquid	Illiquid
USD-BRL_1 week	49	0.75	37,218,343	572,590	Illiquid	Illiquid
USD-BRL_1 month	22	0.34	649,038,589	9,985,209	Illiquid	Illiquid
USD-BRL_3 months	20	0.31	293,354,215	4,513,142	Illiquid	Illiquid
USD-BRL_6 months	1	0.02	593,757	9,135	Illiquid	Illiquid
USD-BWP_<1 week	56	0.86	40,235,160	619,002	Illiquid	Illiquid
USD-BWP_1 week	2	0.03	983,971	15,138	Illiquid	Illiquid
USD-BWP_1 month	6	0.09	16,289,266	250,604	Illiquid	Illiquid
USD-BWP_3 months	5	0.08	6,557,299	100,882	Illiquid	Illiquid
USD-BYR_<1 week	3	0.05	346,426	5,330	Illiquid	Illiquid
USD-BYR_1 month	2	0.03	246,175	3,787	Illiquid	Illiquid
USD-BYR_3 months	1	0.02	92,658	1,426	Illiquid	Illiquid
USD-CAD_<1 week	14,534	223.60	224,418,252,876	3,452,588,506	Liquid	Liquid
USD-CAD_1 week	6,473	99.58	16,822,489,872	258,807,536	Liquid	Liquid
USD-CAD_1 month	4,562	70.18	36,715,670,966	564,856,476	Liquid	Liquid
USD-CAD_3 months	3,426	52.71	26,624,353,233	409,605,434	Liquid	Liquid
USD-CAD_6 months	5,080	78.15	30,936,253,084	475,942,355	Liquid	Liquid
USD-CAD_1 year	250	3.85	2,454,172,502	37,756,500	Illiquid	Illiquid
USD-CAD_2 years	115	1.77	835,885,651	12,859,779	Illiquid	Illiquid
USD-CAD_3 years	30	0.46	31,284,405	481,299	Illiquid	Illiquid
USD-CAD_4 years	12	0.18	26,683,630	410,517	Illiquid	Illiquid
USD-CAD_5 years	4	0.06	41,405,399	637,006	Illiquid	Illiquid
USD-CAD_6 years	13	0.20	6,827,324	105,036	Illiquid	Illiquid
USD-CAD_7 years	1	0.02	4,931,802	75,874	Illiquid	Illiquid
USD-CAD_8 years	1	0.02	4,894,298	75,297	Illiquid	Illiquid
USD-CAD_10 years	2	0.03	36,492,758	561,427	Illiquid	Illiquid
USD-CAD_9 years	1	0.02	3,945,615	60,702	Illiquid	Illiquid
USD-CHF_<1 week	9,597	147.65	432,719,993,047	6,657,230,662	Liquid	Liquid
USD-CHF_1 week	2,235	34.38	27,549,665,039	423,841,001	Liquid	Liquid
USD-CHF_1 month	4,334	66.68	51,264,242,225	788,680,650	Liquid	Liquid
USD-CHF_3 months	2,059	31.68	31,842,783,638	489,888,979	Liquid	Liquid
USD-CHF_6 months	1,834	28.22	18,949,405,576	291,529,317	Liquid	Liquid
USD-CHF_1 year	172	2.65	3,840,595,673	59,086,087	Illiquid	Illiquid
USD-CHF_2 years	44	0.68	775,051,842	11,923,874	Illiquid	Illiquid
USD-CHF_3 years	2	0.03	185,923,322	2,860,359	Illiquid	Illiquid
USD-CHF_5 years	4	0.06	13,416,805	206,412	Illiquid	Illiquid
USD-CHF_6 years	1	0.02	3,626,164	55,787	Illiquid	Illiquid
USD-CLP_<1 week	1	0.02	411,806	6,335	Illiquid	Illiquid
USD-CLP_1 week	2	0.03	6,337,456	97,499	Illiquid	Illiquid
USD-CLP_1 month	1	0.02	2,443,237	37,588	Illiquid	Illiquid
USD-CLP_3 months	5	0.08	25,577,524	393,500	Illiquid	Illiquid
USD-CLP_6 months	2	0.03	6,100,845	93,859	Illiquid	Illiquid
USD-CNH_<1 week	67	1.03	404,782,646	6,227,425	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-CNH_1 week	62	0.95	1,768,227,030	27,203,493	Illiquid	Illiquid
USD-CNH_1 month	42	0.65	705,609,055	10,855,524	Illiquid	Illiquid
USD-CNH_3 months	50	0.77	1,354,249,347	20,834,605	Illiquid	Illiquid
USD-CNH_6 months	29	0.45	701,006,378	10,784,714	Illiquid	Illiquid
USD-CNH_1 year	47	0.72	498,336,385	7,666,714	Illiquid	Illiquid
USD-CNH_2 years	54	0.83	471,384,068	7,252,063	Illiquid	Illiquid
USD-CNY_<1 week	4,999	76.91	126,194,734,048	1,941,457,447	Liquid	Liquid
USD-CNY_1 week	711	10.94	11,117,203,503	171,033,900	Illiquid	Liquid
USD-CNY_1 month	1,229	18.91	22,834,108,794	351,293,981	Liquid	Liquid
USD-CNY_3 months	1,342	20.65	22,552,987,218	346,969,034	Liquid	Liquid
USD-CNY_6 months	1,407	21.65	26,560,286,415	408,619,791	Liquid	Liquid
USD-CNY_1 year	1,677	25.80	23,615,838,256	363,320,589	Liquid	Liquid
USD-CNY_2 years	1,387	21.34	25,578,997,764	393,523,043	Liquid	Liquid
USD-CNY_3 years	275	4.23	3,881,694,061	59,718,370	Illiquid	Illiquid
USD-CNY_4 years	46	0.71	198,210,812	3,049,397	Illiquid	Illiquid
USD-CNY_5 years	12	0.18	23,314,479	358,684	Illiquid	Illiquid
USD-CNY_6 years	1	0.02	1,450,465	22,315	Illiquid	Illiquid
USD-COP_<1 week	11	0.17	101,059,264	1,554,758	Illiquid	Illiquid
USD-COP_1 week	7	0.11	9,712,822	149,428	Illiquid	Illiquid
USD-COP_3 months	8	0.12	98,475,482	1,515,007	Illiquid	Illiquid
USD-COP_6 months	3	0.05	55,439,734	852,919	Illiquid	Illiquid
USD-CZK_<1 week	2,212	34.03	21,883,689,694	336,672,149	Liquid	Illiquid
USD-CZK_1 week	492	7.57	3,936,032,712	60,554,349	Illiquid	Illiquid
USD-CZK_1 month	647	9.95	3,362,965,791	51,737,935	Illiquid	Illiquid
USD-CZK_3 months	459	7.06	2,854,841,744	43,920,642	Illiquid	Illiquid
USD-CZK_6 months	650	10.00	1,330,892,438	20,475,268	Illiquid	Illiquid
USD-CZK_1 year	38	0.58	187,677,843	2,887,351	Illiquid	Illiquid
USD-CZK_2 years	13	0.20	105,899,437	1,629,222	Illiquid	Illiquid
USD-CZK_4 years	2	0.03	8,267,653	127,195	Illiquid	Illiquid
USD-CZK_5 years	5	0.08	17,695,678	272,241	Illiquid	Illiquid
USD-DJF_1 week	2	0.03	631,151	9,710	Illiquid	Illiquid
USD-DKK_<1 week	3,130	48.15	145,375,682,318	2,236,548,959	Liquid	Liquid
USD-DKK_1 week	1,207	18.57	25,344,739,488	389,919,069	Liquid	Liquid
USD-DKK_1 month	853	13.12	19,456,865,657	299,336,395	Liquid	Liquid
USD-DKK_3 months	450	6.92	10,921,576,362	168,024,252	Illiquid	Illiquid
USD-DKK_6 months	555	8.54	6,699,256,566	103,065,486	Illiquid	Illiquid
USD-DKK_1 year	72	1.11	1,053,843,004	16,212,969	Illiquid	Illiquid
USD-DKK_2 years	30	0.46	1,165,381,928	17,928,953	Illiquid	Illiquid
USD-DKK_3 years	7	0.11	353,017,014	5,431,031	Illiquid	Illiquid
USD-DKK_4 years	15	0.23	391,706,168	6,026,249	Illiquid	Illiquid
USD-EGP_<1 week	2	0.03	223,702	3,442	Illiquid	Illiquid
USD-EGP_1 week	6	0.09	4,031,134	62,017	Illiquid	Illiquid
USD-ETB_<1 week	1	0.02	71,542	1,101	Illiquid	Illiquid
USD-GHS_<1 week	49	0.75	102,896,264	1,583,019	Illiquid	Illiquid
USD-GHS_1 month	4	0.06	29,272,546	450,347	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-GHS__3 months	2	0.03	1,707,768	26,273	Illiquid	Illiquid
USD-GHS__1 year	3	0.05	30,265,834	465,628	Illiquid	Illiquid
USD-GHS__2 years	1	0.02	15,747	242	Illiquid	Illiquid
USD-HKD__<1 week	3,018	46.43	83,162,568,527	1,279,424,131	Liquid	Illiquid
USD-HKD__1 week	560	8.62	6,801,515,511	104,638,700	Illiquid	Illiquid
USD-HKD__1 month	783	12.05	9,076,592,958	139,639,892	Illiquid	Illiquid
USD-HKD__3 months	477	7.34	5,114,134,496	78,678,992	Illiquid	Illiquid
USD-HKD__6 months	574	8.83	5,721,294,455	88,019,915	Illiquid	Illiquid
USD-HKD__1 year	89	1.37	1,851,073,928	28,478,060	Illiquid	Illiquid
USD-HKD__2 years	48	0.74	1,985,615,250	30,547,927	Illiquid	Illiquid
USD-HKD__3 years	19	0.29	1,469,171,989	22,602,646	Illiquid	Illiquid
USD-HRK__<1 week	35	0.54	42,017,770	646,427	Illiquid	Illiquid
USD-HRK__1 week	5	0.08	3,064,037	47,139	Illiquid	Illiquid
USD-HRK__1 month	14	0.22	34,835,713	535,934	Illiquid	Illiquid
USD-HRK__3 months	6	0.09	50,693,403	779,899	Illiquid	Illiquid
USD-HRK__1 year	1	0.02	10,878,491	167,361	Illiquid	Illiquid
USD-HUF__<1 week	2,819	43.37	213,527,540,519	3,285,039,085	Liquid	Liquid
USD-HUF__1 week	490	7.54	32,449,140,925	499,217,553	Liquid	Liquid
USD-HUF__1 month	904	13.91	99,962,397,144	1,537,883,033	Liquid	Liquid
USD-HUF__3 months	518	7.97	114,739,989,489	1,765,230,608	Liquid	Liquid
USD-HUF__6 months	695	10.69	2,364,379,330	36,375,067	Illiquid	Illiquid
USD-HUF__1 year	24	0.37	86,177,857	1,325,813	Illiquid	Illiquid
USD-HUF__2 years	17	0.26	225,557,289	3,470,112	Illiquid	Illiquid
USD-HUF__3 years	6	0.09	211,393,545	3,252,208	Illiquid	Illiquid
USD-HUF__4 years	1	0.02	2,538,315	39,051	Illiquid	Illiquid
USD-IDR__<1 week	83	1.28	583,185,859	8,972,090	Illiquid	Illiquid
USD-IDR__1 week	60	0.92	89,344,414	1,374,529	Illiquid	Illiquid
USD-IDR__1 month	33	0.51	290,994,104	4,476,832	Illiquid	Illiquid
USD-IDR__3 months	74	1.14	254,004,536	3,907,762	Illiquid	Illiquid
USD-IDR__6 months	50	0.77	240,968,300	3,707,205	Illiquid	Illiquid
USD-IDR__1 year	10	0.15	26,471,357	407,252	Illiquid	Illiquid
USD-IDR__2 years	3	0.05	10,878,491	167,361	Illiquid	Illiquid
USD-IDR__6 years	1	0.02	21,428,628	329,671	Illiquid	Illiquid
USD-ILS__<1 week	1,150	17.69	17,649,941,688	271,537,564	Liquid	Illiquid
USD-ILS__1 week	363	5.58	1,666,050,013	25,631,539	Illiquid	Illiquid
USD-ILS__1 month	883	13.58	5,334,809,414	82,073,991	Illiquid	Illiquid
USD-ILS__3 months	501	7.71	2,154,713,032	33,149,431	Illiquid	Illiquid
USD-ILS__6 months	956	14.71	2,201,407,712	33,867,811	Illiquid	Illiquid
USD-ILS__1 year	8	0.12	38,839,191	597,526	Illiquid	Illiquid
USD-ILS__2 years	6	0.09	72,888,330	1,121,359	Illiquid	Illiquid
USD-INR__<1 week	910	14.00	14,303,138,016	220,048,277	Illiquid	Illiquid
USD-INR__1 week	350	5.38	2,912,282,892	44,804,352	Illiquid	Illiquid
USD-INR__1 month	647	9.95	4,387,039,731	67,492,919	Illiquid	Illiquid
USD-INR__3 months	557	8.57	2,453,869,353	37,751,836	Illiquid	Illiquid
USD-INR__6 months	304	4.68	1,539,503,548	23,684,670	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-INR__1 year	447	6.88	2,471,849,152	38,028,448	Illiquid	Illiquid
USD-INR__2 years	61	0.94	255,286,912	3,927,491	Illiquid	Illiquid
USD-INR__3 years	11	0.17	89,203,624	1,372,363	Illiquid	Illiquid
USD-INR__4 years	2	0.03	4,692,682	72,195	Illiquid	Illiquid
USD-INR__10 years	1	0.02	36,261,636	557,871	Illiquid	Illiquid
USD-ISK__<1 week	1	0.02	1,989,290	30,604	Illiquid	Illiquid
USD-ISK__1 month	1	0.02	1,516,405	23,329	Illiquid	Illiquid
USD-JOD__<1 week	12	0.18	62,997,226	969,188	Illiquid	Illiquid
USD-JOD__1 week	5	0.08	110,556,649	1,700,872	Illiquid	Illiquid
USD-JOD__1 month	1	0.02	7,252,327	111,574	Illiquid	Illiquid
USD-JPY__<1 week	18,494	284.52	1,001,837,057,191	15,412,877,803	Liquid	Liquid
USD-JPY__1 week	6,912	106.34	187,543,275,748	2,885,281,165	Liquid	Liquid
USD-JPY__1 month	9,431	145.09	130,870,402,962	2,013,390,815	Liquid	Liquid
USD-JPY__3 months	5,279	81.22	74,920,079,603	1,152,616,609	Liquid	Liquid
USD-JPY__6 months	6,566	101.02	66,079,583,420	1,016,608,976	Liquid	Liquid
USD-JPY__1 year	323	4.97	8,989,071,677	138,293,410	Illiquid	Illiquid
USD-JPY__2 years	217	3.34	4,997,060,649	76,877,856	Illiquid	Illiquid
USD-JPY__3 years	42	0.65	407,135,318	6,263,620	Illiquid	Illiquid
USD-JPY__4 years	16	0.25	147,033,493	2,262,054	Illiquid	Illiquid
USD-JPY__5 years	6	0.09	38,207,524	587,808	Illiquid	Illiquid
USD-JPY__6 years	9	0.14	54,824,591	843,455	Illiquid	Illiquid
USD-JPY__7 years	2	0.03	14,504,654	223,149	Illiquid	Illiquid
USD-JPY__8 years	4	0.06	17,996,888	276,875	Illiquid	Illiquid
USD-JPY__16 years	4	0.06	8,854,630	136,225	Illiquid	Illiquid
USD-JPY__10 years	3	0.05	29,584,832	455,151	Illiquid	Illiquid
USD-JPY__11 years	2	0.03	13,634,375	209,760	Illiquid	Illiquid
USD-JPY__12 years	4	0.06	8,852,522	136,193	Illiquid	Illiquid
USD-JPY__14 years	5	0.08	24,273,165	373,433	Illiquid	Illiquid
USD-JPY__15 years	2	0.03	10,488,274	161,358	Illiquid	Illiquid
USD-JPY__20 years	5	0.08	42,875,226	659,619	Illiquid	Illiquid
USD-JPY__9 years	1	0.02	2,900,931	44,630	Illiquid	Illiquid
USD-KES__<1 week	46	0.71	25,851,947	397,722	Illiquid	Illiquid
USD-KES__1 week	20	0.31	53,214,594	818,686	Illiquid	Illiquid
USD-KES__1 month	1	0.02	4,172,605	64,194	Illiquid	Illiquid
USD-KES__3 months	3	0.05	7,472,634	114,964	Illiquid	Illiquid
USD-KES__6 months	1	0.02	5,841,646	89,871	Illiquid	Illiquid
USD-KES__1 year	1	0.02	33,037	508	Illiquid	Illiquid
USD-KRW__<1 week	694	10.68	25,174,534,001	387,300,523	Liquid	Illiquid
USD-KRW__1 week	118	1.82	3,047,757,458	46,888,576	Illiquid	Illiquid
USD-KRW__1 month	143	2.20	3,692,376,908	56,805,799	Illiquid	Illiquid
USD-KRW__3 months	126	1.94	3,324,892,192	51,152,188	Illiquid	Illiquid
USD-KRW__6 months	69	1.06	1,352,393,926	20,806,060	Illiquid	Illiquid
USD-KRW__1 year	48	0.74	787,790,028	12,119,847	Illiquid	Illiquid
USD-KRW__2 years	18	0.28	176,455,013	2,714,693	Illiquid	Illiquid
USD-KRW__3 years	1	0.02	4,329,639	66,610	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-KWD_<1 week	264	4.06	2,395,594,177	36,855,295	Illiquid	Illiquid
USD-KWD_1 week	91	1.40	883,216,348	13,587,944	Illiquid	Illiquid
USD-KWD_1 month	45	0.69	417,619,355	6,424,913	Illiquid	Illiquid
USD-KWD_3 months	23	0.35	226,718,630	3,487,979	Illiquid	Illiquid
USD-KWD_6 months	15	0.23	259,142,814	3,986,813	Illiquid	Illiquid
USD-KWD_1 year	6	0.09	60,350,372	928,467	Illiquid	Illiquid
USD-KWD_2 years	5	0.08	105,158,744	1,617,827	Illiquid	Illiquid
USD-KWD_3 years	6	0.09	106,869,753	1,644,150	Illiquid	Illiquid
USD-KWD_4 years	3	0.05	58,018,617	892,594	Illiquid	Illiquid
USD-KZT_<1 week	25	0.38	89,511,999	1,377,108	Illiquid	Illiquid
USD-KZT_1 week	7	0.11	70,250,492	1,080,777	Illiquid	Illiquid
USD-KZT_1 month	8	0.12	90,841,860	1,397,567	Illiquid	Illiquid
USD-KZT_3 months	6	0.09	64,931,191	998,941	Illiquid	Illiquid
USD-LKR_1 week	3	0.05	1,137,125	17,494	Illiquid	Illiquid
USD-LKR_1 month	11	0.17	11,973,866	184,213	Illiquid	Illiquid
USD-LKR_3 months	8	0.12	10,749,305	165,374	Illiquid	Illiquid
USD-LKR_6 months	2	0.03	2,175,698	33,472	Illiquid	Illiquid
USD-LKR_1 year	6	0.09	10,153,258	156,204	Illiquid	Illiquid
USD-LTL_<1 week	16	0.25	9,013,290	138,666	Illiquid	Illiquid
USD-LTL_1 week	5	0.08	5,202,283	80,035	Illiquid	Illiquid
USD-LTL_1 month	8	0.12	1,194,667	18,379	Illiquid	Illiquid
USD-LTL_3 months	9	0.14	2,836,701	43,642	Illiquid	Illiquid
USD-LTL_6 months	4	0.06	7,765,284	119,466	Illiquid	Illiquid
USD-LTL_1 year	1	0.02	435,140	6,694	Illiquid	Illiquid
USD-MAD_<1 week	96	1.48	199,851,833	3,074,644	Illiquid	Illiquid
USD-MAD_1 week	3	0.05	6,385,667	98,241	Illiquid	Illiquid
USD-MAD_1 month	22	0.34	34,218,695	526,441	Illiquid	Illiquid
USD-MAD_3 months	5	0.08	11,106,873	170,875	Illiquid	Illiquid
USD-MAD_6 months	1	0.02	719,709	11,072	Illiquid	Illiquid
USD-MAD_1 year	1	0.02	3,626,164	55,787	Illiquid	Illiquid
USD-MUR_<1 week	33	0.51	18,964,888	291,768	Illiquid	Illiquid
USD-MUR_1 week	2	0.03	362,987	5,584	Illiquid	Illiquid
USD-MUR_1 month	4	0.06	3,454,124	53,140	Illiquid	Illiquid
USD-MUR_6 months	2	0.03	2,032,627	31,271	Illiquid	Illiquid
USD-MUR_1 year	3	0.05	3,089,979	47,538	Illiquid	Illiquid
USD-MWK_<1 week	1	0.02	1,183	18	Illiquid	Illiquid
USD-MXN_<1 week	3,477	53.49	48,439,987,169	745,230,572	Liquid	Illiquid
USD-MXN_1 week	1,202	18.49	11,531,736,930	177,411,337	Illiquid	Illiquid
USD-MXN_1 month	2,435	37.46	16,026,460,800	246,560,935	Illiquid	Illiquid
USD-MXN_3 months	2,667	41.03	10,852,768,581	166,965,670	Illiquid	Illiquid
USD-MXN_6 months	1,402	21.57	7,461,526,525	114,792,716	Illiquid	Illiquid
USD-MXN_1 year	94	1.45	721,855,574	11,105,470	Illiquid	Illiquid
USD-MXN_2 years	54	0.83	278,232,230	4,280,496	Illiquid	Illiquid
USD-MXN_3 years	3	0.05	9,970,788	153,397	Illiquid	Illiquid
USD-MXN_4 years	1	0.02	7,252,327	111,574	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-MXN_6 years	2	0.03	3,692,632	56,810	Illiquid	Illiquid
USD-MYR_<1 week	40	0.62	1,265,520,840	19,469,551	Illiquid	Illiquid
USD-MYR_1 week	39	0.60	19,546,300	300,712	Illiquid	Illiquid
USD-MYR_1 month	3	0.05	1,883,045	28,970	Illiquid	Illiquid
USD-MYR_3 months	41	0.63	108,125,832	1,663,474	Illiquid	Illiquid
USD-MYR_6 months	1	0.02	3,340,306	51,389	Illiquid	Illiquid
USD-MYR_2 years	1	0.02	436,034	6,708	Illiquid	Illiquid
USD-NGN_<1 week	33	0.51	81,769,945	1,257,999	Illiquid	Illiquid
USD-NGN_1 week	2	0.03	333,357	5,129	Illiquid	Illiquid
USD-NGN_1 month	2	0.03	18,367,429	282,576	Illiquid	Illiquid
USD-NGN_3 months	5	0.08	22,301,857	343,105	Illiquid	Illiquid
USD-NGN_6 months	1	0.02	4,089,648	62,918	Illiquid	Illiquid
USD-NOK_<1 week	4,718	72.58	198,522,593,292	3,054,193,743	Liquid	Liquid
USD-NOK_1 week	1,009	15.52	25,221,054,370	388,016,221	Liquid	Liquid
USD-NOK_1 month	1,612	24.80	24,148,768,127	371,519,510	Liquid	Liquid
USD-NOK_3 months	1,797	27.65	27,424,051,641	421,908,487	Liquid	Liquid
USD-NOK_6 months	2,599	39.98	21,768,781,606	334,904,332	Liquid	Liquid
USD-NOK_1 year	103	1.58	1,112,718,254	17,118,742	Illiquid	Illiquid
USD-NOK_2 years	93	1.43	517,387,957	7,959,815	Illiquid	Illiquid
USD-NOK_3 years	14	0.22	102,875,212	1,582,696	Illiquid	Illiquid
USD-NOK_4 years	12	0.18	142,233,366	2,188,206	Illiquid	Illiquid
USD-NZD_<1 week	7,255	111.62	120,903,857,600	1,860,059,348	Liquid	Illiquid
USD-NZD_1 week	7,160	110.15	12,853,885,928	197,752,091	Illiquid	Illiquid
USD-NZD_1 month	3,285	50.54	14,002,699,003	215,426,139	Illiquid	Illiquid
USD-NZD_3 months	2,004	30.83	9,534,770,337	146,688,774	Illiquid	Illiquid
USD-NZD_6 months	3,958	60.89	11,265,700,370	173,318,467	Illiquid	Illiquid
USD-NZD_1 year	82	1.26	700,433,437	10,775,899	Illiquid	Illiquid
USD-NZD_2 years	45	0.69	217,621,979	3,348,030	Illiquid	Illiquid
USD-NZD_4 years	1	0.02	5,289,837	81,382	Illiquid	Illiquid
USD-OMR_<1 week	59	0.91	259,565,707	3,993,319	Illiquid	Illiquid
USD-OMR_1 week	18	0.28	142,701,092	2,195,401	Illiquid	Illiquid
USD-OMR_1 month	9	0.14	39,352,094	605,417	Illiquid	Illiquid
USD-OMR_3 months	7	0.11	56,150,471	863,853	Illiquid	Illiquid
USD-OMR_6 months	2	0.03	12,103,082	186,201	Illiquid	Illiquid
USD-OMR_1 year	1	0.02	7,252,327	111,574	Illiquid	Illiquid
USD-OMR_2 years	1	0.02	18,130,818	278,936	Illiquid	Illiquid
USD-OMR_3 years	3	0.05	54,392,454	836,807	Illiquid	Illiquid
USD-OMR_4 years	3	0.05	90,654,090	1,394,678	Illiquid	Illiquid
USD-PEN_<1 week	1	0.02	79,947,301	1,229,958	Illiquid	Illiquid
USD-PEN_1 week	14	0.22	15,275,186	235,003	Illiquid	Illiquid
USD-PEN_1 month	17	0.26	174,271,813	2,681,105	Illiquid	Illiquid
USD-PEN_3 months	18	0.28	255,321,073	3,928,017	Illiquid	Illiquid
USD-PEN_6 months	3	0.05	1,005,477	15,469	Illiquid	Illiquid
USD-PHP_<1 week	80	1.23	273,240,889	4,203,706	Illiquid	Illiquid
USD-PHP_1 week	76	1.17	48,337,010	743,646	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-PHP_1 month	19	0.29	114,304,930	1,758,537	Illiquid	Illiquid
USD-PHP_3 months	24	0.37	160,397,257	2,467,650	Illiquid	Illiquid
USD-PHP_6 months	8	0.12	27,379,853	421,229	Illiquid	Illiquid
USD-PHP_1 year	13	0.20	68,414,292	1,052,528	Illiquid	Illiquid
USD-PHP_2 years	2	0.03	14,504,654	223,149	Illiquid	Illiquid
USD-PKR_<1 week	1	0.02	3,626,164	55,787	Illiquid	Illiquid
USD-PKR_1 week	3	0.05	10,878,491	167,361	Illiquid	Illiquid
USD-PKR_3 months	3	0.05	1,129,859	17,382	Illiquid	Illiquid
USD-PKR_1 year	1	0.02	725,233	11,157	Illiquid	Illiquid
USD-PLN_<1 week	3,137	48.26	62,606,977,856	963,184,275	Liquid	Illiquid
USD-PLN_1 week	888	13.66	8,025,997,991	123,476,892	Illiquid	Illiquid
USD-PLN_1 month	1,331	20.48	6,935,334,081	106,697,447	Illiquid	Illiquid
USD-PLN_3 months	1,001	15.40	9,977,931,235	153,506,634	Illiquid	Illiquid
USD-PLN_6 months	1,281	19.71	4,037,367,454	62,113,345	Illiquid	Illiquid
USD-PLN_1 year	34	0.52	356,176,813	5,479,643	Illiquid	Illiquid
USD-PLN_2 years	26	0.40	321,850,245	4,951,542	Illiquid	Illiquid
USD-PLN_3 years	4	0.06	36,261,636	557,871	Illiquid	Illiquid
USD-PLN_4 years	1	0.02	12,111,386	186,329	Illiquid	Illiquid
USD-PLN_6 years	1	0.02	7,252,327	111,574	Illiquid	Illiquid
USD-QAR_<1 week	187	2.88	2,756,750,495	42,411,546	Illiquid	Illiquid
USD-QAR_1 week	81	1.25	771,430,651	11,868,164	Illiquid	Illiquid
USD-QAR_1 month	49	0.75	467,614,897	7,194,075	Illiquid	Illiquid
USD-QAR_3 months	32	0.49	376,559,648	5,793,225	Illiquid	Illiquid
USD-QAR_6 months	7	0.11	60,401,206	929,249	Illiquid	Illiquid
USD-QAR_2 years	13	0.20	4,714,381,578	72,528,947	Illiquid	Illiquid
USD-QAR_3 years	2	0.03	36,261,636	557,871	Illiquid	Illiquid
USD-RON_<1 week	335	5.15	1,235,650,953	19,010,015	Illiquid	Illiquid
USD-RON_1 week	59	0.91	189,070,701	2,908,780	Illiquid	Illiquid
USD-RON_1 month	164	2.52	905,901,464	13,936,946	Illiquid	Illiquid
USD-RON_3 months	87	1.34	408,419,071	6,283,370	Illiquid	Illiquid
USD-RON_6 months	66	1.02	347,407,847	5,344,736	Illiquid	Illiquid
USD-RON_1 year	11	0.17	43,236,654	665,179	Illiquid	Illiquid
USD-RON_2 years	1	0.02	145,047	2,231	Illiquid	Illiquid
USD-RSD_<1 week	5	0.08	6,618,350	101,821	Illiquid	Illiquid
USD-RSD_1 week	2	0.03	1,009,585	15,532	Illiquid	Illiquid
USD-RSD_1 month	1	0.02	1,137,868	17,506	Illiquid	Illiquid
USD-RSD_3 months	2	0.03	7,367,500	113,346	Illiquid	Illiquid
USD-RUB_<1 week	2,580	39.69	57,666,648,889	887,179,214	Liquid	Illiquid
USD-RUB_1 week	236	3.63	3,475,106,074	53,463,170	Illiquid	Illiquid
USD-RUB_1 month	651	10.02	10,937,502,100	168,269,263	Illiquid	Illiquid
USD-RUB_3 months	448	6.89	7,019,937,187	107,999,034	Illiquid	Illiquid
USD-RUB_6 months	237	3.65	4,135,987,975	63,630,584	Illiquid	Illiquid
USD-RUB_1 year	144	2.22	1,997,584,398	30,732,068	Illiquid	Illiquid
USD-RUB_2 years	128	1.97	1,616,939,222	24,875,988	Illiquid	Illiquid
USD-RUB_3 years	5	0.08	35,655,203	548,542	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-RUB_4 years	1	0.02	24,161,004	371,708	Illiquid	Illiquid
USD-SAR_<1 week	382	5.88	8,964,154,235	137,910,065	Illiquid	Illiquid
USD-SAR_1 week	145	2.23	3,875,513,957	59,623,292	Illiquid	Illiquid
USD-SAR_1 month	86	1.32	2,174,408,023	33,452,431	Illiquid	Illiquid
USD-SAR_3 months	65	1.00	868,934,138	13,368,218	Illiquid	Illiquid
USD-SAR_6 months	27	0.42	468,557,643	7,208,579	Illiquid	Illiquid
USD-SAR_1 year	32	0.49	721,914,959	11,106,384	Illiquid	Illiquid
USD-SAR_2 years	14	0.22	396,182,745	6,095,119	Illiquid	Illiquid
USD-SAR_3 years	4	0.06	50,778,665	781,210	Illiquid	Illiquid
USD-SEK_<1 week	7,858	120.89	330,850,427,187	5,090,006,572	Liquid	Liquid
USD-SEK_1 week	1,825	28.08	34,412,568,288	529,424,128	Liquid	Liquid
USD-SEK_1 month	2,666	41.02	51,718,896,571	795,675,332	Liquid	Liquid
USD-SEK_3 months	2,218	34.12	40,293,901,938	619,906,184	Liquid	Liquid
USD-SEK_6 months	3,119	47.98	31,833,193,342	489,741,436	Liquid	Liquid
USD-SEK_1 year	253	3.89	4,139,364,791	63,682,535	Illiquid	Illiquid
USD-SEK_2 years	74	1.14	735,508,016	11,315,508	Illiquid	Illiquid
USD-SEK_3 years	17	0.26	16,352,618	251,579	Illiquid	Illiquid
USD-SEK_4 years	14	0.22	33,839,359	520,606	Illiquid	Illiquid
USD-SEK_5 years	14	0.22	1,797,608	27,656	Illiquid	Illiquid
USD-SEK_6 years	1	0.02	76,149	1,172	Illiquid	Illiquid
USD-SGD_<1 week	5,027	77.34	104,140,212,509	1,602,157,116	Liquid	Illiquid
USD-SGD_1 week	1,466	22.55	6,261,828,234	96,335,819	Illiquid	Illiquid
USD-SGD_1 month	4,901	75.40	15,071,059,863	231,862,459	Illiquid	Illiquid
USD-SGD_3 months	1,255	19.31	8,675,024,537	133,461,916	Illiquid	Illiquid
USD-SGD_6 months	2,009	30.91	9,586,577,594	147,485,809	Illiquid	Illiquid
USD-SGD_1 year	104	1.60	2,007,063,318	30,877,897	Illiquid	Illiquid
USD-SGD_2 years	42	0.65	725,179,678	11,156,610	Illiquid	Illiquid
USD-THB_<1 week	1,584	24.37	18,298,789,587	281,519,840	Liquid	Illiquid
USD-THB_1 week	349	5.37	2,054,571,201	31,608,788	Illiquid	Illiquid
USD-THB_1 month	819	12.60	2,342,897,724	36,044,580	Illiquid	Illiquid
USD-THB_3 months	511	7.86	2,137,573,707	32,885,749	Illiquid	Illiquid
USD-THB_6 months	720	11.08	1,937,840,070	29,812,924	Illiquid	Illiquid
USD-THB_1 year	73	1.12	637,499,838	9,807,690	Illiquid	Illiquid
USD-THB_2 years	22	0.34	315,542,024	4,854,493	Illiquid	Illiquid
USD-THB_3 years	1	0.02	1,118,485	17,207	Illiquid	Illiquid
USD-THB_5 years	1	0.02	782,940	12,045	Illiquid	Illiquid
USD-THB_6 years	3	0.05	817,377	12,575	Illiquid	Illiquid
USD-TND_<1 week	56	0.86	98,636,550	1,517,485	Illiquid	Illiquid
USD-TND_1 week	3	0.05	4,568,230	70,280	Illiquid	Illiquid
USD-TND_1 month	21	0.32	38,608,351	593,975	Illiquid	Illiquid
USD-TND_3 months	3	0.05	631,193	9,711	Illiquid	Illiquid
USD-TND_2 years	2	0.03	359,095	5,525	Illiquid	Illiquid
USD-TRY_<1 week	5,496	84.55	88,759,685,303	1,365,533,620	Liquid	Liquid
USD-TRY_1 week	990	15.23	6,288,987,155	96,753,649	Illiquid	Liquid
USD-TRY_1 month	2,511	38.63	21,421,057,924	329,554,737	Liquid	Liquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
USD-TRY__3 months	1,469	22.60	15,868,815,547	244,135,624	Illiquid	Illiquid
USD-TRY__6 months	1,614	24.83	5,786,342,068	89,020,647	Illiquid	Illiquid
USD-TRY__1 year	128	1.97	1,455,426,727	22,391,180	Illiquid	Illiquid
USD-TRY__2 years	63	0.97	426,221,879	6,557,260	Illiquid	Illiquid
USD-TRY__3 years	1	0.02	10,878,491	167,361	Illiquid	Illiquid
USD-TRY__5 years	1	0.02	7,614,944	117,153	Illiquid	Illiquid
USD-TWD__<1 week	253	3.89	4,615,124,662	71,001,918	Illiquid	Illiquid
USD-TWD__1 week	20	0.31	301,433,026	4,637,431	Illiquid	Illiquid
USD-TWD__1 month	57	0.88	861,091,797	13,247,566	Illiquid	Illiquid
USD-TWD__3 months	56	0.86	847,190,605	13,033,702	Illiquid	Illiquid
USD-TWD__6 months	38	0.58	562,732,745	8,657,427	Illiquid	Illiquid
USD-TWD__1 year	24	0.37	296,158,664	4,556,287	Illiquid	Illiquid
USD-TWD__2 years	11	0.17	134,168,053	2,064,124	Illiquid	Illiquid
USD-UGX__<1 week	41	0.63	16,489,669	253,687	Illiquid	Illiquid
USD-UGX__1 month	5	0.08	8,849,191	136,141	Illiquid	Illiquid
USD-UGX__3 months	1	0.02	3,624,996	55,769	Illiquid	Illiquid
USD-VND__<1 week	3	0.05	14,504,654	223,149	Illiquid	Illiquid
USD-VND__1 week	4	0.06	15,955,120	245,463	Illiquid	Illiquid
USD-VND__1 month	5	0.08	11,595,150	178,387	Illiquid	Illiquid
USD-VND__3 months	6	0.09	30,468,256	468,742	Illiquid	Illiquid
USD-VND__6 months	5	0.08	10,720,029	164,924	Illiquid	Illiquid
USD-XAG__<1 week	15	0.23	37,996,461	584,561	Illiquid	Illiquid
USD-XAG__1 week	2	0.03	12,879,193	198,141	Illiquid	Illiquid
USD-XAG__1 month	4	0.06	1,749,507	26,915	Illiquid	Illiquid
USD-XAG__2 years	9	0.14	68,473,790	1,053,443	Illiquid	Illiquid
USD-XAU__<1 week	788	12.12	58,888,177,758	905,971,966	Liquid	Illiquid
USD-XAU__1 week	49	0.75	2,071,011,794	31,861,720	Illiquid	Illiquid
USD-XAU__1 month	95	1.46	322,311,573	4,958,640	Illiquid	Illiquid
USD-XAU__3 months	71	1.09	295,487,983	4,545,969	Illiquid	Illiquid
USD-XAU__6 months	16	0.25	118,555,945	1,823,938	Illiquid	Illiquid
USD-XPB__<1 week	5	0.08	1,274,720	19,611	Illiquid	Illiquid
USD-XPB__1 week	2	0.03	1,123,256	17,281	Illiquid	Illiquid
USD-XPB__1 month	2	0.03	1,280,221	19,696	Illiquid	Illiquid
USD-XPT__<1 week	5	0.08	7,488,194	115,203	Illiquid	Illiquid
USD-ZAR__<1 week	5,415	83.31	81,453,880,614	1,253,136,625	Liquid	Illiquid
USD-ZAR__1 week	1,881	28.94	13,649,289,164	209,989,064	Illiquid	Illiquid
USD-ZAR__1 month	3,024	46.52	11,735,737,490	180,549,808	Illiquid	Illiquid
USD-ZAR__3 months	1,583	24.35	8,027,732,965	123,503,584	Illiquid	Illiquid
USD-ZAR__6 months	2,014	30.98	7,436,937,184	114,414,418	Illiquid	Illiquid
USD-ZAR__1 year	215	3.31	1,699,371,801	26,144,182	Illiquid	Illiquid
USD-ZAR__2 years	34	0.52	253,168,873	3,894,906	Illiquid	Illiquid
USD-ZAR__3 years	1	0.02	1,255,080	19,309	Illiquid	Illiquid
USD-ZMW__<1 week	24	0.37	20,318,280	312,589	Illiquid	Illiquid
USD-ZMW__3 months	1	0.02	3,351,513	51,562	Illiquid	Illiquid
ZAR-CZK__<1 week	1	0.02	646	10	Illiquid	Illiquid

					Criteria applied for liquidity classification	
Notional Amount per day					250,000,000	
Num of trades per day					5.00	
FX SWAPS	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
ZAR-CZK__1 week	1	0.02	44,579	686	Illiquid	Illiquid
ZAR-CZK__3 months	3	0.05	144,026	2,216	Illiquid	Illiquid
ZAR-DKK__<1 week	6	0.09	1,994,426	30,683	Illiquid	Illiquid
ZAR-DKK__1 week	19	0.29	3,503,132	53,894	Illiquid	Illiquid
ZAR-DKK__1 month	5	0.08	648,414	9,976	Illiquid	Illiquid
ZAR-DKK__3 months	6	0.09	394,243	6,065	Illiquid	Illiquid
ZAR-DKK__6 months	2	0.03	2,038,428	31,360	Illiquid	Illiquid
ZAR-DKK__1 year	1	0.02	5,677	87	Illiquid	Illiquid
ZAR-HKD__<1 week	6	0.09	283,209	4,357	Illiquid	Illiquid
ZAR-HKD__1 week	7	0.11	217,071	3,340	Illiquid	Illiquid
ZAR-HKD__1 month	1	0.02	18,824	290	Illiquid	Illiquid
ZAR-HKD__3 months	1	0.02	102,875	1,583	Illiquid	Illiquid
ZAR-HUF__3 months	1	0.02	159,291	2,451	Illiquid	Illiquid
ZAR-INR__<1 week	1	0.02	681	10	Illiquid	Illiquid
ZAR-MXN__<1 week	1	0.02	106,606,337	1,640,097	Illiquid	Illiquid
ZAR-MXN__1 week	2	0.03	158,929	2,445	Illiquid	Illiquid
ZAR-PLN__<1 week	2	0.03	6,783,134	104,356	Illiquid	Illiquid
ZAR-PLN__1 week	1	0.02	693	11	Illiquid	Illiquid
ZAR-PLN__3 months	2	0.03	7,017,621	107,963	Illiquid	Illiquid
ZAR-RUB__<1 week	3	0.05	22,551,095	346,940	Illiquid	Illiquid
ZAR-RUB__1 month	2	0.03	26,634,637	409,764	Illiquid	Illiquid
ZAR-SEK__<1 week	32	0.49	47,062,489	724,038	Illiquid	Illiquid
ZAR-SEK__1 week	18	0.28	33,630,018	517,385	Illiquid	Illiquid
ZAR-SEK__1 month	9	0.14	69,583,986	1,070,523	Illiquid	Illiquid
ZAR-SEK__3 months	7	0.11	296,870,940	4,567,245	Illiquid	Illiquid
ZAR-SEK__6 months	4	0.06	3,209,712	49,380	Illiquid	Illiquid
ZAR-SEK__1 year	1	0.02	627,046	9,647	Illiquid	Illiquid
ZAR-THB__<1 week	1	0.02	5,294	81	Illiquid	Illiquid
ZAR-THB__1 week	1	0.02	592	9	Illiquid	Illiquid

Table 6: FX swaps - liquidity assessment

Spread betting

15. The class of spread betting contracts was divided into more granular sub-classes on the basis of the two following criteria:
 - i. the underlying currency pair;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. The same approach used for forwards was applied to define the tenor buckets.

16. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the “Liquidity Flag” is based, are indicated. For each sub-class the assessment of liquidity based on the quantitative criteria was confirmed. As a result, the field “Liquidity Flag” has to be considered as the final classification of the sub-class. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered¹³.

¹³ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
AUD-CAD__<1 week	64,234	988.22	745,452,413	11,468,499	Liquid
AUD-CHF__<1 week	42,658	656.28	355,310,851	5,466,321	Illiquid
AUD-JPY__<1 week	175,629	2,701.98	265,712,068,501	4,087,877,977	Liquid
AUD-NZD__<1 week	122,156	1,879.32	2,509,922,779	38,614,197	Liquid
AUD-USD__<1 week	745,421	11,468.02	12,707,136,687	195,494,411	Liquid
AUD-USD__1 week	10	0.15	615,107	9,463	Illiquid
AUD-USD__1 month	30	0.46	565,998	8,708	Illiquid
AUD-USD__3 months	18	0.28	40,123	617	Illiquid
AUD-USD__6 months	5	0.08	741,602	11,409	Illiquid
AUD-USD__1 year	2	0.03	69,631	1,071	Illiquid
AUD-USD__2 years	2	0.03	5,998,632	92,287	Illiquid
CAD-CHF__<1 week	24,898	383.05	235,139,659	3,617,533	Illiquid
CAD-JPY__<1 week	63,103	970.82	69,415,353,350	1,067,928,513	Liquid
CAD-NZD__<1 week	36,273	558.05	404,927,510	6,229,654	Illiquid
CHF-JPY__<1 week	80,026	1,231.17	122,865,573,820	1,890,239,597	Liquid
CHF-NOK__<1 week	2,995	46.08	171,397,336	2,636,882	Illiquid
CHF-NZD__<1 week	10,169	156.45	118,260,484	1,819,392	Illiquid
CHF-SEK__<1 week	2,561	39.40	137,754,980	2,119,307	Illiquid
EUR-AUD__<1 week	269,474	4,145.75	8,191,014,085	126,015,601	Liquid
EUR-AUD__1 week	8	0.12	3,916,424	60,253	Illiquid
EUR-AUD__1 month	5	0.08	2,209,396	33,991	Illiquid
EUR-AUD__3 months	16	0.25	26,062,500	400,962	Illiquid
EUR-AUD__6 months	4	0.06	5,781,253	88,942	Illiquid
EUR-BRL__1 month	1	0.02	2,806,025	43,170	Illiquid
EUR-BRL__3 months	2	0.03	233,690	3,595	Illiquid
EUR-BRL__6 months	1	0.02	721,318	11,097	Illiquid
EUR-BRL__1 year	2	0.03	802,124	12,340	Illiquid
EUR-CAD__<1 week	115,393	1,775.28	3,218,642,283	49,517,574	Liquid
EUR-CAD__1 week	6	0.09	9,498,640	146,133	Illiquid
EUR-CAD__1 month	5	0.08	1,635,766	25,166	Illiquid
EUR-CAD__3 months	15	0.23	41,341,259	636,019	Illiquid
EUR-CAD__6 months	4	0.06	2,145,810	33,012	Illiquid
EUR-CHF__<1 week	152,870	2,351.85	8,158,912,492	125,521,731	Liquid
EUR-CHF__1 week	2	0.03	315,918	4,860	Illiquid
EUR-CHF__1 month	2	0.03	2,214,898	34,075	Illiquid
EUR-CHF__3 months	19	0.29	159,625,401	2,455,775	Illiquid
EUR-CHF__6 months	7	0.11	19,675,838	302,705	Illiquid
EUR-CNY__1 month	4	0.06	8,141,376	125,252	Illiquid
EUR-CNY__3 months	1	0.02	28,146	433	Illiquid
EUR-CNY__6 months	1	0.02	65,675	1,010	Illiquid

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
EUR-CNY__1 year	4	0.06	12,025,330	185,005	Illiquid
EUR-CZK__<1 week	491	7.55	341,095,005	5,247,615	Illiquid
EUR-CZK__1 week	2	0.03	291,682	4,487	Illiquid
EUR-CZK__2 years	2	0.03	346,373	5,329	Illiquid
EUR-DKK__<1 week	331	5.09	62,230,882	957,398	Illiquid
EUR-DKK__1 week	4	0.06	656,439	10,099	Illiquid
EUR-DKK__1 month	1	0.02	359,525	5,531	Illiquid
EUR-DKK__3 months	5	0.08	5,307,242	81,650	Illiquid
EUR-DKK__6 months	7	0.11	226,502,065	3,484,647	Illiquid
EUR-GBP__<1 week	188,858	2,905.51	2,997,224,098	46,111,140	Liquid
EUR-GBP__1 week	17	0.26	39,232,706	603,580	Illiquid
EUR-GBP__1 month	69	1.06	345,725,070	5,318,847	Illiquid
EUR-GBP__3 months	71	1.09	312,366,352	4,805,636	Illiquid
EUR-GBP__6 months	28	0.43	44,002,990	676,969	Illiquid
EUR-GBP__1 year	25	0.38	5,230,355	80,467	Illiquid
EUR-GBP__2 years	41	0.63	11,263,508	173,285	Illiquid
EUR-HKD__<1 week	9	0.14	5,504,363	84,683	Illiquid
EUR-HKD__1 week	2	0.03	775,936	11,937	Illiquid
EUR-HKD__3 months	2	0.03	5,077,800	78,120	Illiquid
EUR-HUF__<1 week	6,852	105.42	66,281,602,271	1,019,716,958	Liquid
EUR-HUF__1 week	1	0.02	400,325	6,159	Illiquid
EUR-HUF__1 month	1	0.02	680,223	10,465	Illiquid
EUR-HUF__6 months	2	0.03	1,666,333	25,636	Illiquid
EUR-IDR__3 months	1	0.02	750,000	11,538	Illiquid
EUR-IDR__1 year	3	0.05	8,427,202	129,649	Illiquid
EUR-ILS__<1 week	3	0.05	29,306	451	Illiquid
EUR-ILS__6 months	1	0.02	684,801	10,535	Illiquid
EUR-INR__<1 week	1	0.02	12,481	192	Illiquid
EUR-INR__3 months	5	0.08	1,171,193	18,018	Illiquid
EUR-INR__1 year	1	0.02	602,223	9,265	Illiquid
EUR-ISK__<1 week	2	0.03	167,780	2,581	Illiquid
EUR-JPY__<1 week	648,498	9,976.89	2,158,149,952,555	33,202,306,962	Liquid
EUR-JPY__1 week	18	0.28	6,801,220	104,634	Illiquid
EUR-JPY__1 month	73	1.12	3,309,318	50,913	Illiquid
EUR-JPY__3 months	35	0.54	214,498,200	3,299,972	Illiquid
EUR-JPY__6 months	7	0.11	31,485,431	484,391	Illiquid
EUR-KES__<1 week	5	0.08	33,761	519	Illiquid
EUR-KRW__6 months	1	0.02	311,889	4,798	Illiquid
EUR-KRW__1 year	1	0.02	779,721	11,996	Illiquid
EUR-MXN__<1 week	8	0.12	2,343,714	36,057	Illiquid

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
EUR-MXN__1 week	2	0.03	700,718	10,780	Illiquid
EUR-MXN__3 months	1	0.02	626,487	9,638	Illiquid
EUR-MXN__6 months	1	0.02	1,375,796	21,166	Illiquid
EUR-MYR__<1 week	1	0.02	3,517,567	54,116	Illiquid
EUR-MYR__3 months	1	0.02	106,654	1,641	Illiquid
EUR-MYR__6 months	2	0.03	3,656,302	56,251	Illiquid
EUR-MYR__1 year	1	0.02	347,444	5,345	Illiquid
EUR-NOK__<1 week	5,924	91.14	1,003,643,125	15,440,663	Liquid
EUR-NOK__1 week	3	0.05	926,295	14,251	Illiquid
EUR-NOK__1 month	1	0.02	121,499	1,869	Illiquid
EUR-NOK__3 months	8	0.12	8,979,492	138,146	Illiquid
EUR-NOK__6 months	3	0.05	1,980,431	30,468	Illiquid
EUR-NZD__<1 week	90,480	1,392.00	2,520,851,691	38,782,334	Liquid
EUR-NZD__1 week	6	0.09	7,731,143	118,941	Illiquid
EUR-NZD__1 month	2	0.03	1,991,468	30,638	Illiquid
EUR-NZD__3 months	6	0.09	4,686,173	72,095	Illiquid
EUR-NZD__6 months	1	0.02	560,100	8,617	Illiquid
EUR-PLN__<1 week	3,604	55.45	431,730,040	6,642,001	Illiquid
EUR-PLN__1 week	1	0.02	200,000	3,077	Illiquid
EUR-PLN__3 months	3	0.05	2,365,919	36,399	Illiquid
EUR-PLN__6 months	1	0.02	716,326	11,020	Illiquid
EUR-RON__<1 week	4	0.06	95,701,369	1,472,329	Illiquid
EUR-RUB__<1 week	1	0.02	400,000	6,154	Illiquid
EUR-SEK__<1 week	7,257	111.65	1,476,957,657	22,722,425	Liquid
EUR-SEK__1 week	2	0.03	377,651	5,810	Illiquid
EUR-SEK__1 month	1	0.02	200,545	3,085	Illiquid
EUR-SEK__3 months	11	0.17	43,648,211	671,511	Illiquid
EUR-SEK__6 months	5	0.08	11,185,964	172,092	Illiquid
EUR-SGD__<1 week	12	0.18	20,012,397	307,883	Illiquid
EUR-SGD__1 week	4	0.06	542,736	8,350	Illiquid
EUR-SGD__1 month	1	0.02	880	14	Illiquid
EUR-SGD__3 months	2	0.03	2,897,010	44,569	Illiquid
EUR-SGD__6 months	1	0.02	3,458,429	53,207	Illiquid
EUR-THB__<1 week	6	0.09	673,589	10,363	Illiquid
EUR-TND__<1 week	1	0.02	363,640	5,594	Illiquid
EUR-TND__1 week	1	0.02	360,198	5,542	Illiquid
EUR-TRY__<1 week	8,550	131.54	773,782,774	11,904,350	Liquid
EUR-TRY__3 months	4	0.06	1,406,940	21,645	Illiquid
EUR-USD__<1 week	2,892,515	44,500.23	131,896,768,906	2,029,181,060	Liquid
EUR-USD__1 week	91	1.40	249,184,197	3,833,603	Illiquid

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
EUR-USD__1 month	226	3.48	685,069,165	10,539,526	Illiquid
EUR-USD__3 months	218	3.35	4,049,688,124	62,302,894	Illiquid
EUR-USD__6 months	33	0.51	182,421,761	2,806,489	Illiquid
EUR-USD__1 year	34	0.52	30,768,110	473,356	Illiquid
EUR-USD__2 years	19	0.29	21,102,324	324,651	Illiquid
EUR-USD__3 years	2	0.03	13,309,859	204,767	Illiquid
EUR-ZAR__<1 week	7	0.11	1,026,857	15,798	Illiquid
EUR-ZAR__1 week	1	0.02	26,357	405	Illiquid
EUR-ZAR__3 months	3	0.05	446,754	6,873	Illiquid
EUR-ZAR__6 months	1	0.02	150,747	2,319	Illiquid
GBP-AUD__<1 week	210,362	3,236.34	10,266,564,351	157,947,144	Liquid
GBP-AUD__1 week	2	0.03	12,051	185	Illiquid
GBP-CAD__<1 week	98,990	1,522.92	4,701,491,475	72,330,638	Liquid
GBP-CHF__<1 week	86,693	1,333.74	2,866,364,769	44,097,920	Liquid
GBP-JPY__<1 week	709,467	10,914.88	2,838,374,990,361	43,667,307,544	Liquid
GBP-MXN__3 months	1	0.02	4,176,321	64,251	Illiquid
GBP-NOK__1 week	1	0.02	54,608	840	Illiquid
GBP-NZD__<1 week	151,027	2,323.49	6,571,617,181	101,101,803	Liquid
GBP-NZD__1 week	1	0.02	6,846	105	Illiquid
GBP-PLN__1 month	1	0.02	702	11	Illiquid
GBP-PLN__3 months	3	0.05	18,743,872	288,367	Illiquid
GBP-SEK__<1 week	7,681	118.17	1,117,813,568	17,197,132	Liquid
GBP-SGD__<1 week	2	0.03	1,371,256	21,096	Illiquid
GBP-SGD__1 week	1	0.02	1,153	18	Illiquid
GBP-USD__<1 week	1,464,559	22,531.68	112,797,282,128	1,735,342,802	Liquid
GBP-USD__1 week	15	0.23	24,645,250	379,158	Illiquid
GBP-USD__1 month	78	1.20	102,491	1,577	Illiquid
GBP-USD__3 months	17	0.26	334,204	5,142	Illiquid
GBP-USD__6 months	7	0.11	546,427	8,407	Illiquid
GBP-USD__1 year	2	0.03	182,025	2,800	Illiquid
JPY-HKD__<1 week	423	6.51	7,287,568	112,116	Illiquid
JPY-NOK__<1 week	1,199	18.45	18,408,198	283,203	Illiquid
JPY-NOK__1 week	2	0.03	148,293	2,281	Illiquid
JPY-NZD__<1 week	84,078	1,293.51	81,957,213,420	1,260,880,206	Liquid
JPY-SEK__<1 week	1,068	16.43	9,124,446	140,376	Illiquid
JPY-SGD__<1 week	898	13.82	278,349,155	4,282,295	Illiquid
JPY-TRY__<1 week	1,322	20.34	277,907,431	4,275,499	Illiquid
JPY-ZAR__<1 week	1,239	19.06	12,386,299	190,558	Illiquid
NOK-SEK__<1 week	15	0.23	158,989	2,446	Illiquid
PLN-LTL__<1 week	3	0.05	20,606	317	Illiquid

					Criteria applied for liquidity classification
					10,000,000
					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
USD-BRL__<1 week	1	0.02	456,787	7,027	Illiquid
USD-BRL__1 month	1	0.02	1,300,585	20,009	Illiquid
USD-BRL__3 months	1	0.02	703,686	10,826	Illiquid
USD-BRL__6 months	1	0.02	1,273,442	19,591	Illiquid
USD-CAD__<1 week	487,911	7,506.32	13,073,364,504	201,128,685	Liquid
USD-CHF__<1 week	403,817	6,212.57	6,342,899,518	97,583,070	Liquid
USD-CHF__1 week	1	0.02	31,173	480	Illiquid
USD-CNH__<1 week	3	0.05	21,757	335	Illiquid
USD-CNY__<1 week	17,940	276.00	2,446,321,991	37,635,723	Liquid
USD-CNY__1 week	1	0.02	5,801,862	89,259	Illiquid
USD-CNY__6 months	1	0.02	1,602,500	24,654	Illiquid
USD-CNY__3 years	3	0.05	8,111,712	124,796	Illiquid
USD-CZK__<1 week	2,337	35.95	242,892,052	3,736,801	Illiquid
USD-CZK__1 week	1	0.02	74,999	1,154	Illiquid
USD-DKK__<1 week	7,351	113.09	727,488,314	11,192,128	Liquid
USD-DKK__1 week	1	0.02	115,600	1,778	Illiquid
USD-HKD__<1 week	11,755	180.85	1,145,037,230	17,615,957	Liquid
USD-HKD__1 week	6	0.09	1,403,513	21,593	Illiquid
USD-HUF__<1 week	2,530	38.92	15,487,810,782	238,274,012	Illiquid
USD-HUF__1 week	1	0.02	90,074	1,386	Illiquid
USD-HUF__1 month	1	0.02	1,272,165	19,572	Illiquid
USD-ILS__<1 week	726	11.17	120,921,836	1,860,336	Illiquid
USD-JPY__<1 week	1,100,922	16,937.26	2,695,730,824,692	41,472,781,918	Liquid
USD-JPY__1 week	43	0.66	39,607,449	609,345	Illiquid
USD-JPY__1 month	21	0.32	3,178,639	48,902	Illiquid
USD-JPY__3 months	11	0.17	280,126	4,310	Illiquid
USD-JPY__6 months	5	0.08	818,483	12,592	Illiquid
USD-JPY__1 year	3	0.05	92,448	1,422	Illiquid
USD-JPY__2 years	2	0.03	5,998	92	Illiquid
USD-LTL__<1 week	4	0.06	8,920	137	Illiquid
USD-MXN__<1 week	19,248	296.12	3,024,002,671	46,523,118	Liquid
USD-MXN__1 week	2	0.03	276,203	4,249	Illiquid
USD-MXN__3 months	7	0.11	4,720,357	72,621	Illiquid
USD-NOK__<1 week	8,120	124.92	646,835,630	9,951,317	Illiquid
USD-NOK__1 week	1	0.02	81,226	1,250	Illiquid
USD-NZD__<1 week	461,639	7,102.14	6,038,142,406	92,894,499	Liquid
USD-NZD__1 week	2	0.03	31,117	479	Illiquid
USD-PLN__<1 week	1,882	28.95	36,763,800	565,597	Illiquid
USD-PLN__1 month	1	0.02	1,269,157	19,525	Illiquid
USD-RUB__<1 week	3,527	54.26	1,117,474,648	17,191,918	Liquid

					Criteria applied for liquidity classification
					10,000,000
					50.00
SPREAD BETTING	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
USD-SEK__<1 week	18,362	282.49	1,626,107,017	25,017,031	Liquid
USD-SGD__<1 week	7,967	122.57	164,758,007	2,534,739	Illiquid
USD-SGD__1 week	1	0.02	185,602	2,855	Illiquid
USD-TRY__<1 week	22,883	352.05	4,062,830,008	62,505,077	Liquid
USD-TRY__6 months	1	0.02	264,710	4,072	Illiquid
USD-XAU__<1 week	1	0.02	94,748	1,458	Illiquid
USD-ZAR__<1 week	15,996	246.09	3,427,123,206	52,724,972	Liquid
USD-ZAR__1 week	1	0.02	669,787	10,304	Illiquid
USD-ZAR__6 months	1	0.02	617,252	9,496	Illiquid

Table 7: Spread betting - liquidity assessment

FX Futures

17. ESMA also collected data from trading venues over the period 1 June 2013 – 31 May 2014. The sample is limited to 76 instruments, 59% of which did not trade.
18. The instruments were grouped into sub-classes on the basis of the two following criteria:
 - i. the underlying currency pair;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. The same approach used for forwards was applied to define the tenor buckets.
19. The table below provides the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the “Liquidity Flag” is based, are indicated. The liquidity of each sub-class is then confirmed or amended in the “Final Liquidity Flag” field. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro.

								Criteria applied for liquidity classification
Notional Amount per day								30,000
Num of trades per day								1.00
FX FUTURES	Num of Instruments that did trade	Num of Instruments that did NOT trade	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
EUR/CHF__1 year	1	-	2	0.01	67,387	185	Illiquid	Illiquid
EUR/JPY__1 week	1	-	46	6.57	1,617	231	Illiquid	Illiquid
EUR/JPY__6 months	1	-	436	2.42	26,932	150	Illiquid	Illiquid
EUR/JPY__1 year	2	-	743	2.04	33,289	91	Illiquid	Illiquid
EUR/JPY__2 years	1	-	200	0.27	14,286	20	Illiquid	Illiquid
EUR/RON__1 month	1	1	158	5.27	490,000	16,333	Illiquid	Illiquid
EUR/RON__6 months	1	1	290	1.61	1,034,000	5,744	Illiquid	Illiquid
EUR/RON__1 year	1	1	114	0.31	234,000	641	Illiquid	Illiquid
EUR/RON__2 years	3	-	40	0.05	55,000	75	Illiquid	Illiquid
EUR/USD__1 month	2	-	509	16.97	5,992,023	199,734	Liquid	Liquid
EUR/USD__3 months	2	1	13	0.14	2,780,000	30,889	Illiquid	Liquid
EUR/USD__6 months	4	-	5,225	29.03	47,389,920	263,277	Liquid	Liquid
EUR/USD__1 year	2	5	5,175	14.18	37,201,086	101,921	Liquid	Liquid
EUR/USD__2 years	4	5	3,552	4.87	27,299,120	37,396	Liquid	Liquid
GBP/EUR__6 months	-	2	-	-	-	-	Illiquid	Illiquid
GBP/EUR__1 year	-	6	-	-	-	-	Illiquid	Illiquid
GBP/EUR__2 years	-	6	-	-	-	-	Illiquid	Illiquid

								Criteria applied for liquidity classification
Notional Amount per day								30,000
Num of trades per day								1.00
FX FUTURES	Num of Instruments that did trade	Num of Instruments that did NOT trade	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag	Final Liquidity Flag
GBP/USD__1 week	1	-	4	0.57	6,739	963	Illiquid	Illiquid
GBP/USD__6 months	1	2	147	0.82	736,762	4,093	Illiquid	Illiquid
GBP/USD__1 year	2	6	560	1.53	2,942,556	8,062	Illiquid	Illiquid
GBP/USD__2 years	1	6	85	0.12	296,502	406	Illiquid	Illiquid
USD/RON__1 month	-	1	-	-	-	-	Illiquid	Illiquid
USD/RON__6 months	-	1	-	-	-	-	Illiquid	Illiquid
USD/RON__1 year	-	1	-	-	-	-	Illiquid	Illiquid
	31	45	17,299		126,601,218			

Table 8: FX Futures - liquidity assessment

Proposal

20. ESMA is of the opinion that classes of financial instruments included in Annex III, Section 6 of draft RTS 9 are liquid.

Q1. Do you agree with ESMA's proposal for the definition of a liquid market? Please provide an answer detailed per asset class identified (deliverable forwards, non-deliverable forwards, options, swaps, spread betting contracts and futures) addressing the following points:

- (1) Would you use different qualitative criteria to define the sub-classes? Please also specify if you agree in distinguishing or not distinguishing between deliverable and non-deliverable contracts. If you would distinguish between deliverable and non-deliverable contracts for other classes besides forwards, please provide your feedback as specific as possible with regard to the sub-classes that should be deemed liquid for deliverable contracts and those for non-deliverable contracts, pointing out the differences between the two sub-groups.**
- (2) Would you use different parameters or the same parameters (i.e. average number of trades per day and average notional amount traded per day) but different thresholds in order to define a sub-class as liquid?**
- (3) Would you define some specific classes declared as liquid in ESMA's proposal as illiquid (and vice versa)? Please provide reasons for your answer.**

Pre-trade and Post-trade transparency requirements for non-equity instruments

[Sections 3.6 - Pre-trade transparency for non-equity instruments and 3.7 - Post-trade transparency requirements for non-equity instruments of the CP]

21. The tables below present the detailed results of the calculations to set the large in scale (LIS) thresholds for foreign exchange derivatives which are provided in Annex III Section 6 of draft RTS 9. The following rules have been applied in the determination of such thresholds¹⁴:

- i. The threshold for liquid sub-classes is determined as the greater of:
 - a. the threshold determined so that at least 90% of the trades would lie below the threshold and;
 - b. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
- ii. The threshold for illiquid classes and sub-classes is determined as the greater of:
 - a. the threshold determined so that at least 70% of the trades would lie below the threshold and;
 - b. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
- iii. The SSTI threshold is then set as 50% of the relevant LIS.

However, for all sub-classes of FX futures the LIS thresholds were set equal to €100,000, which corresponds to the LIS threshold floor (provided in Section 11 of Annex III of draft RTS 9) since the thresholds calculated according to the above methodology, and estimated from the percentiles related to the distribution of trades requested in the data collection from trading venues¹⁵, were significantly smaller than the floor.

¹⁴ This is the methodology to set the thresholds under option 1 and for year 2017 under option 2 in the Consultation Paper of December 2014.

¹⁵ In particular, the percentile requested was defined as follows: the notional amount value V above which $(100 - p)\%$ of the trades have a notional amount value greater than V . e.g. in the case of the 90th percentile the notional amount value above which 10% of the trades have a notional amount value greater than that has to be provided. The figure had to be expressed in euros. Last but not least, the percentiles from 5% to 95% at 5% steps (i.e. 5%, 10%, 15%, ..., 90%, 95%) were requested.

22. Furthermore, the following tables also include the results of the simulation of the calculation of the thresholds according to ESMA's preferred option¹⁶. In other words, they present the results obtained when applying the methodology proposed for the annual recalculation of the LIS and SSTI thresholds and summarised below:
- i. The LIS threshold would be determined as the greater of:
 - a. the threshold determined so that at least 90% of the trades would lie below the threshold (**criterion 1**);
 - b. the threshold determined so that at least 70% of the total volume traded for that sub-class would lie below the threshold (**criterion 2**) and;
 - c. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
 - ii. The SSTI threshold would be set as 50% of the relevant LIS.
23. More specifically, three tables are provided for each class of foreign exchange derivatives:
- i. The first table - "LIS calculations on the basis of 10% of trades above LIS rule" - provides the following information:
 - a. for each sub-class the LIS is calculated so that at least 90% of the trades are below the LIS threshold;
 - b. the number of days on which at least one trade was recorded;
 - c. the number of trades above the LIS threshold;
 - d. the notional amount corresponding to the trades above the LIS threshold;
 - e. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - f. the rounded value of the LIS threshold;
 - g. for the "OTHERS" sub-class only, the LIS calculated so that at least 70% of the trades are below the LIS threshold;

¹⁶ Option 2 in the Consultation Paper of December 2014.

- ii. The second table - "LIS calculations on the basis of 30% notional amount above LIS rule" - provides for the following information:
 - a. for each sub-class the LIS calculated so that at least 70% of the notional amount is below the threshold;
 - b. the number of trades above the LIS threshold;
 - c. the notional amount corresponding to the trades above the LIS threshold;
 - d. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - e. the rounded value of the LIS threshold;
 - iii. The third table - "Threshold selection" – provides the following information:
 - a. for each sub-class the LIS is calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**);
 - b. for each sub-class the LIS calculated so that at least 70% of the notional amount is below the threshold (**criterion 2**);
 - c. the selected LIS threshold as the greater between the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2**¹⁷;
 - d. the rounded value of the selected LIS threshold;
 - e. the threshold for the sub-class applicable for **option 1**¹⁸ (pre-set LIS thresholds without annual recalculation) and for **option 2**¹⁹ (annual recalculation of LIS thresholds from 2018 onwards) only **for 2017** as provided in Section 6 of Annex III of draft RTS 9.
24. Last but not least, it is evident that for some sub-classes the LIS thresholds obtained according to criterion 1 and criterion 2 differ substantially. Furthermore, there are additional complications with the calculations when the number of trades is relatively small. ESMA is aware of these shortcomings and will undertake to fine-tune the methodology proposed in order to tackle these issues after having received feedback to the CP.

¹⁷ According to option 2 in the Consultation Paper of December 2014 the selected threshold should also be greater than the LIS threshold floor, otherwise the latter would prevail.

¹⁸ Option 1 in the Consultation Paper of December 2014.

¹⁹ Option 2 in the Consultation Paper of December 2014.

LIS calculations on the basis of 10% of trades above LIS rule

NON-DELIVERABLE FORWARDS (NDF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-EUR <1 w week	10%	78	50,000	10,564	1,930,689,050	10.00%	69.21%	50,000
AUD-EUR 1 w week	10%	55	29,903	416	530,677,851	10.00%	97.18%	30,000
AUD-EUR 1 month	10%	75	10,000	1,855	540,167,957	10.00%	93.65%	10,000
AUD-EUR 3 months	10%	60	3,439,816	81	1,387,259,943	10.01%	84.83%	3,500,000
AUD-EUR 6 months	10%	66	192,576	897	808,875,379	10.00%	80.04%	200,000
AUD-GBP <1 w week	10%	78	36,405	5,581	2,064,024,186	10.00%	85.48%	40,000
AUD-GBP 1 w week	10%	57	46,113	297	2,322,394,101	10.00%	99.37%	50,000
AUD-GBP 1 month	10%	74	12,135	1,843	1,298,308,930	10.00%	96.04%	10,000
AUD-GBP 3 months	10%	50	20,068,679	37	2,976,147,910	10.05%	87.86%	20,000,000
AUD-GBP 6 months	10%	67	325,592	396	543,571,685	10.00%	72.44%	300,000
AUD-JPY <1 w week	10%	78	26,781	4,842	16,432,054,970	10.00%	98.89%	30,000
AUD-JPY 1 w week	10%	40	3,777,625	145	2,514,935,745	9.99%	93.80%	4,000,000
AUD-JPY 1 month	10%	70	6,695	645	1,019,850,388	10.00%	99.02%	10,000
AUD-JPY 3 months	10%	47	8,413,519	32	1,965,003,277	9.91%	91.49%	8,500,000
AUD-JPY 6 months	10%	65	15,840,197	929	45,995,954,342	10.00%	63.07%	15,000,000
AUD-USD <1 w week	10%	80	40,171	85,128	14,416,980,480	10.00%	73.97%	40,000
AUD-USD 1 w week	10%	62	43,317	1,398	5,237,611,318	10.00%	99.09%	40,000
AUD-USD 1 month	10%	80	6,695	6,884	4,710,695,002	10.00%	98.26%	10,000
AUD-USD 3 months	10%	67	6,189,359	157	11,322,178,743	10.02%	96.62%	6,000,000
AUD-USD 6 months	10%	76	120,862	2,400	1,907,360,777	10.00%	82.39%	100,000
BRL-USD <1 w week	10%	34	39,887,799	41	1,866,214,799	10.05%	36.98%	40,000,000
BRL-USD 1 w week	10%	40	37,734,174	46	2,448,550,227	10.11%	45.36%	40,000,000
BRL-USD 1 month	10%	56	16,680,353	126	5,057,911,191	9.97%	64.97%	15,000,000
BRL-USD 3 months	10%	55	13,964,715	127	5,399,222,719	10.00%	77.02%	15,000,000
BRL-USD 6 months	10%	40	34,811,170	15	773,048,238	10.34%	48.64%	35,000,000
CAD-EUR <1 w week	10%	79	45,000	3,943	765,087,872	10.00%	74.13%	40,000
CAD-EUR 1 w week	10%	49	50,000	185	296,271,018	10.00%	97.06%	50,000
CAD-EUR 1 month	10%	72	30,000	680	615,496,033	10.00%	96.68%	30,000
CAD-EUR 3 months	10%	59	2,756,397	78	970,569,397	10.03%	81.31%	3,000,000
CAD-EUR 6 months	10%	70	152,266	958	546,549,878	10.00%	73.79%	200,000
CAD-GBP <1 w week	10%	78	36,405	4,912	1,599,961,245	10.00%	82.95%	40,000
CAD-GBP 1 w week	10%	52	12,135	411	1,707,903,274	10.01%	99.53%	10,000
CAD-GBP 1 month	10%	72	12,135	1,053	386,949,340	10.00%	91.80%	10,000
CAD-GBP 3 months	10%	51	29,195,606	37	2,179,280,872	10.08%	77.06%	30,000,000
CAD-USD <1 w week	10%	79	36,262	35,621	5,480,713,108	10.00%	74.07%	40,000
CAD-USD 1 w week	10%	56	7,252	675	589,430,160	10.01%	98.63%	10,000
CAD-USD 1 month	10%	74	6,596	3,723	732,458,230	10.00%	94.29%	10,000
CAD-USD 3 months	10%	66	902,082	141	2,914,277,643	10.02%	97.45%	900,000
CAD-USD 6 months	10%	75	97,875	1,379	903,331,470	10.00%	81.42%	100,000
CHF-EUR <1 w week	10%	79	50,000	11,036	4,340,076,994	10.00%	83.44%	50,000
CHF-EUR 1 w week	10%	60	480,000	390	1,505,742,447	10.01%	92.53%	500,000
CHF-EUR 1 month	10%	75	30,000	1,081	3,056,166,286	10.00%	98.91%	30,000
CHF-EUR 3 months	10%	63	8,490,207	147	6,515,111,031	10.02%	86.22%	8,500,000
CHF-EUR 6 months	10%	75	244,120	1,738	2,942,527,094	10.00%	80.30%	200,000
CHF-GBP <1 w week	10%	78	24,270	7,441	1,628,983,383	10.00%	81.28%	20,000
CHF-GBP 1 w week	10%	56	217,217	177	3,137,216,546	9.98%	99.30%	200,000
CHF-GBP 1 month	10%	74	12,135	710	1,884,478,385	10.00%	98.98%	10,000
CHF-GBP 3 months	10%	57	17,541,227	55	5,202,628,016	10.09%	91.04%	20,000,000
CHF-GBP 6 months	10%	70	355,968	581	819,922,134	9.99%	77.17%	400,000
CHF-JPY <1 w week	10%	78	24,610	2,478	2,409,314,584	10.00%	94.42%	20,000

LIS calculations on the basis of 10% of trades above LIS rule								
NON-DELIVERABLE FORWARDS (NDF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CHF-JPY_1 week	10%	35	32,813	54	421,624,077	10.07%	99.73%	30,000
CHF-JPY_1 month	10%	65	8,203	429	497,581,950	10.01%	98.61%	10,000
CHF-JPY_3 months	10%	34	26,672,450	11	525,255,636	10.09%	61.50%	25,000,000
CHF-JPY_6 months	10%	59	12,087,432	342	12,874,713,225	10.01%	66.02%	10,000,000
CHF-USD_<1 week	10%	79	36,262	33,830	6,057,415,226	10.00%	77.69%	40,000
CHF-USD_1 week	10%	56	36,262	632	9,583,742,935	10.00%	99.83%	40,000
CHF-USD_1 month	10%	77	7,252	3,073	6,022,353,813	10.00%	99.33%	10,000
CHF-USD_3 months	10%	67	12,073,308	174	14,424,337,095	9.98%	95.10%	10,000,000
CHF-USD_6 months	10%	78	64,625	1,914	1,334,636,662	10.00%	86.36%	60,000
CLP-USD_1 month	10%	40	23,207,447	17	1,035,439,294	10.30%	57.18%	25,000,000
CLP-USD_3 months	10%	61	21,756,982	86	4,463,248,502	10.00%	61.84%	20,000,000
CLP-USD_6 months	10%	40	173,975,351	11	10,669,611,415	10.48%	92.59%	175,000,000
CNY-EUR_1 month	10%	52	14,316,916	18	586,010,986	10.23%	69.07%	15,000,000
CNY-EUR_3 months	10%	49	13,562,354	25	1,242,206,024	9.96%	75.04%	15,000,000
CNY-USD_<1 week	10%	66	36,262	427	2,748,976,979	10.00%	99.30%	40,000
CNY-USD_1 week	10%	56	26,108,378	37	1,812,757,792	10.11%	47.51%	25,000,000
CNY-USD_1 month	10%	67	29,009,309	121	5,376,753,367	10.01%	43.68%	30,000,000
CNY-USD_3 months	10%	64	21,812,376	176	7,715,743,589	10.00%	42.70%	20,000,000
CNY-USD_6 months	10%	53	28,493,029	42	2,508,187,340	10.00%	55.77%	30,000,000
CNY-USD_1 year	10%	59	21,756,982	99	3,968,284,924	10.01%	51.56%	20,000,000
CNY-USD_2 years	10%	59	17,584,882	101	2,960,495,496	10.03%	44.14%	20,000,000
COP-USD_<1 week	10%	14	167,383,711	7	12,431,485,253	10.29%	97.80%	175,000,000
COP-USD_1 week	10%	13	706,158,349	6	18,866,110,403	10.17%	83.41%	700,000,000
COP-USD_1 month	10%	29	69,858,476	11	21,129,830,882	9.73%	95.47%	70,000,000
COP-USD_3 months	10%	48	70,301,884	29	5,850,769,409	9.93%	79.42%	70,000,000
CZK-EUR_1 month	10%	54	12,745,348	39	1,581,691,269	9.97%	74.35%	15,000,000
CZK-EUR_3 months	10%	48	12,773,723	48	1,758,183,580	10.11%	76.61%	15,000,000
CZK-EUR_6 months	10%	48	1,421,951	48	1,144,546,282	9.92%	93.18%	1,500,000
DKK-EUR_<1 week	10%	60	7,464,750	27	818,565,580	9.89%	77.72%	7,500,000
DKK-EUR_1 week	10%	42	7,466,130	21	1,727,479,434	9.95%	91.98%	7,500,000
DKK-EUR_1 month	10%	50	14,500,000	32	2,879,516,835	10.00%	89.28%	15,000,000
DKK-EUR_3 months	10%	41	100,000,000	23	5,288,041,302	10.18%	73.80%	100,000,000
DKK-EUR_6 months	10%	30	89,807,902	8	1,227,807,902	10.67%	79.06%	90,000,000
DKK-GBP_1 week	10%	41	20,942,686	17	1,177,887,987	10.12%	89.90%	20,000,000
DKK-GBP_1 month	10%	50	23,056,524	25	1,468,763,299	10.12%	76.04%	25,000,000
DKK-GBP_3 months	10%	49	23,056,524	26	1,331,433,454	10.00%	67.14%	25,000,000
DKK-USD_<1 week	10%	74	72,523	146	850,121,729	10.02%	98.54%	70,000
DKK-USD_1 week	10%	44	68,897,108	23	4,474,396,664	10.09%	85.09%	70,000,000
DKK-USD_1 month	10%	53	14,504,654	95	8,825,796,360	9.96%	93.02%	15,000,000
DKK-USD_3 months	10%	55	13,054,189	107	14,473,756,865	9.96%	95.46%	15,000,000
DKK-USD_6 months	10%	58	3,935,309	88	5,866,096,126	10.03%	95.65%	4,000,000
DKK-USD_1 year	10%	41	20,095,069	21	2,850,175,153	10.14%	92.66%	20,000,000
EUR-GBP_<1 week	10%	79	20,000	25,090	23,618,891,517	10.00%	96.48%	20,000
EUR-GBP_1 week	10%	60	884,826	621	14,795,520,170	9.99%	97.35%	900,000
EUR-GBP_1 month	10%	75	145,620	2,009	26,441,294,451	10.00%	99.55%	100,000
EUR-GBP_3 months	10%	71	18,000,000	372	31,805,970,830	10.00%	87.06%	20,000,000
EUR-GBP_6 months	10%	76	405,505	1,110	10,258,686,746	10.00%	95.53%	400,000
EUR-GBP_1 year	10%	74	800,000	245	2,007,507,051	9.99%	94.38%	800,000
EUR-GBP_2 years	10%	50	7,000,000	32	629,763,469	10.09%	69.65%	7,000,000
EUR-GBP_3 years	10%	23	32,764,534	7	232,992,242	10.61%	31.80%	35,000,000

LIS calculations on the basis of 10% of trades above LIS rule								
NON-DELIVERABLE FORWARDS (NDF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
EUR-HUF <1 w eek	10%	75	30,000	357	42,549,561,216	10.01%	99.95%	30,000
EUR-HUF 1 w eek	10%	41	15,354,650	30	22,348,463,601	10.17%	98.66%	15,000,000
EUR-HUF 1 month	10%	63	15,359,700	160	27,504,115,017	9.99%	90.20%	15,000,000
EUR-HUF 3 months	10%	55	30,649,000	97	60,516,601,379	9.97%	97.70%	30,000,000
EUR-HUF 6 months	10%	56	76,970,750	241	52,423,729,827	10.02%	56.39%	75,000,000
EUR-HUF 1 year	10%	32	15,285,050	11	637,687,820	10.19%	77.97%	15,000,000
EUR-JPY <1 w eek	10%	79	80,000	80,513	141,845,485,840	10.00%	94.83%	80,000
EUR-JPY 1 w eek	10%	61	2,836,100	929	35,689,262,567	10.00%	98.53%	3,000,000
EUR-JPY 1 month	10%	76	13,000	5,317	12,321,923,612	10.00%	99.05%	10,000
EUR-JPY 3 months	10%	65	11,027,338	198	12,040,546,437	9.98%	86.80%	10,000,000
EUR-JPY 6 months	10%	80	20,869,650	2,347	209,396,375,168	10.00%	77.16%	20,000,000
EUR-NOK <1 w eek	10%	72	8,142,180	249	2,105,411,082	10.01%	58.49%	8,000,000
EUR-NOK 1 w eek	10%	43	8,127,150	36	661,444,856	10.00%	63.50%	8,000,000
EUR-NOK 1 month	10%	61	2,000,000	72	1,378,394,183	9.94%	86.70%	2,000,000
EUR-NOK 3 months	10%	55	5,018,873	57	1,662,857,182	10.05%	75.81%	5,000,000
EUR-NOK 6 months	10%	64	3,632,213	285	2,890,191,088	9.99%	68.56%	3,500,000
EUR-PLN <1 w eek	10%	71	4,185,260	89	457,116,917	10.01%	69.19%	4,000,000
EUR-PLN 1 w eek	10%	45	4,639,407	17	241,950,483	10.00%	69.43%	4,500,000
EUR-PLN 1 month	10%	63	5,729,975	40	528,877,687	10.03%	60.07%	5,500,000
EUR-PLN 3 months	10%	54	7,137,634	36	709,066,285	10.11%	71.24%	7,000,000
EUR-PLN 6 months	10%	61	2,070,150	126	1,048,477,558	10.02%	79.23%	2,000,000
EUR-SEK <1 w eek	10%	72	8,957,350	263	2,907,885,176	10.00%	42.63%	9,000,000
EUR-SEK 1 w eek	10%	52	9,060,980	51	960,779,529	9.98%	62.73%	9,000,000
EUR-SEK 1 month	10%	64	4,942,881	92	2,914,006,802	10.00%	89.89%	5,000,000
EUR-SEK 3 months	10%	64	8,986,841	55	2,699,114,420	10.05%	79.16%	9,000,000
EUR-SEK 6 months	10%	61	2,596,685	308	2,151,658,453	10.01%	65.62%	2,500,000
EUR-USD <1 w eek	10%	79	57,000	422,355	202,249,650,403	10.00%	85.29%	60,000
EUR-USD 1 w eek	10%	66	30,000	11,044	41,109,797,524	10.00%	99.12%	30,000
EUR-USD 1 month	10%	78	12,000	37,410	87,265,624,220	10.00%	99.12%	10,000
EUR-USD 3 months	10%	71	2,001,509	1,875	73,674,616,381	10.00%	95.84%	2,000,000
EUR-USD 6 months	10%	89	345,390	13,515	35,213,646,387	10.00%	83.85%	300,000
EUR-USD 1 year	10%	88	100,000	3,885	5,780,299,382	10.00%	93.72%	100,000
EUR-USD 2 years	10%	65	4,000,000	116	1,559,138,089	10.04%	72.63%	4,000,000
EUR-USD 3 years	10%	42	19,039,400	17	662,414,000	9.88%	61.36%	20,000,000
GBP-HKD 1 w eek	10%	44	41,323,812	16	737,751,769	9.94%	68.62%	40,000,000
GBP-HKD 1 month	10%	61	8,399,868	27	452,981,643	9.96%	61.38%	8,500,000
GBP-HKD 3 months	10%	42	45,724,696	22	1,083,423,360	9.87%	63.02%	45,000,000
GBP-HUF <1 w eek	10%	54	24,270	19	3,546,541,434	10.22%	99.96%	20,000
GBP-HUF 1 w eek	10%	15	3,883,642	2	1,777,948,317	8.70%	99.34%	4,000,000
GBP-HUF 1 month	10%	37	6,067,506	13	3,993,471,550	9.77%	97.84%	6,000,000
GBP-HUF 3 months	10%	37	2,427,003	18	3,495,219,916	10.29%	97.62%	2,500,000
GBP-HUF 6 months	10%	35	45,672,547	19	5,104,537,346	9.90%	57.27%	45,000,000
GBP-JPY <1 w eek	10%	78	99,507	54,978	40,026,958,908	10.00%	82.20%	100,000
GBP-JPY 1 w eek	10%	55	30,338	992	14,614,862,756	10.00%	99.75%	30,000
GBP-JPY 1 month	10%	75	14,562	7,062	6,789,660,623	10.00%	97.24%	10,000
GBP-JPY 3 months	10%	60	33,205,622	108	16,467,421,953	9.99%	91.20%	35,000,000
GBP-JPY 6 months	10%	78	22,457,302	1,357	261,172,253,695	10.00%	86.21%	20,000,000
GBP-NOK 3 months	10%	36	24,299,765	12	548,575,992	9.84%	62.82%	25,000,000
GBP-NOK 6 months	10%	48	3,058,418	70	555,938,874	10.06%	56.02%	3,000,000
GBP-SEK 1 w eek	10%	51	5,031,907	24	695,439,203	10.21%	91.41%	5,000,000

LIS calculations on the basis of 10% of trades above LIS rule								
NON-DELIVERABLE FORWARDS (NDF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
GBP-SEK_1 month	10%	60	5,431,747	28	449,913,167	9.93%	84.65%	5,500,000
GBP-SEK_3 months	10%	40	45,546,069	15	839,404,354	9.80%	52.53%	45,000,000
GBP-USD_<1 week	10%	79	60,675	224,491	90,558,752,009	10.00%	81.62%	60,000
GBP-USD_1 week	10%	63	121,350	2,355	34,003,246,170	10.00%	99.53%	100,000
GBP-USD_1 month	10%	76	12,135	12,865	40,992,624,759	10.00%	99.28%	10,000
GBP-USD_3 months	10%	67	12,505,876	648	71,898,048,971	10.01%	95.85%	15,000,000
GBP-USD_6 months	10%	80	406,125	4,897	28,334,469,866	10.00%	92.00%	400,000
GBP-USD_1 year	10%	82	60,675	2,272	3,516,171,961	10.00%	95.89%	60,000
HUF-USD_<1 week	10%	70	21,757	180	14,105,125,775	10.01%	99.93%	20,000
HUF-USD_1 week	10%	27	226,614,918	8	5,617,378,704	10.00%	88.67%	225,000,000
HUF-USD_1 month	10%	53	32,166,972	36	6,964,857,929	9.94%	86.02%	30,000,000
HUF-USD_3 months	10%	48	40,593,088	36	14,645,371,199	10.08%	92.75%	40,000,000
HUF-USD_6 months	10%	51	40,221,407	127	12,286,063,075	10.01%	50.91%	40,000,000
IDR-USD_<1 week	10%	26	19,896,765	19	70,546,578,769	10.11%	99.32%	20,000,000
IDR-USD_1 week	10%	34	14,686,492	17	58,419,758,478	9.94%	99.07%	15,000,000
IDR-USD_1 month	10%	55	359,613,200	35	270,080,154,723	9.94%	99.22%	350,000,000
IDR-USD_3 months	10%	65	10,878,491	130	726,650,073,165	9.99%	99.53%	10,000,000
IDR-USD_6 months	10%	34	11,724,334	20	116,447,261,664	10.15%	99.65%	10,000,000
INR-USD_<1 week	10%	36	14,115,137	82	4,567,863,500	10.04%	68.76%	15,000,000
INR-USD_1 week	10%	51	27,452,234	62	8,542,052,006	9.94%	71.19%	25,000,000
INR-USD_1 month	10%	65	14,504,654	197	11,775,190,471	9.98%	66.95%	15,000,000
INR-USD_3 months	10%	67	7,252,327	830	22,485,905,560	10.00%	58.47%	7,500,000
INR-USD_6 months	10%	52	21,756,982	39	1,889,995,564	9.95%	50.51%	20,000,000
INR-USD_1 year	10%	41	41,338,265	17	1,183,976,700	9.88%	42.86%	40,000,000
INR-USD_2 years	10%	25	18,130,818	9	241,621,044	10.47%	28.41%	20,000,000
JPY-NZD_<1 week	10%	78	19,915	2,201	6,568,892,262	10.00%	98.82%	20,000
JPY-NZD_1 week	10%	30	2,746,172	61	1,135,567,474	10.02%	92.34%	2,500,000
JPY-NZD_1 month	10%	60	6,223	243	151,878,206	9.98%	97.69%	10,000
JPY-NZD_3 months	10%	9	8,169,717	7	379,075,290	10.29%	94.32%	8,000,000
JPY-NZD_6 months	10%	62	2,760,735	366	4,123,911,222	10.00%	78.50%	3,000,000
JPY-USD_<1 week	10%	79	72,523	114,604	315,058,299,292	10.00%	95.99%	70,000
JPY-USD_1 week	10%	59	5,885,699	1,179	83,939,832,790	10.00%	96.79%	6,000,000
JPY-USD_1 month	10%	76	7,252	6,498	178,737,706,903	10.00%	99.95%	10,000
JPY-USD_3 months	10%	65	18,597,687	234	49,777,720,546	10.02%	94.21%	20,000,000
JPY-USD_6 months	10%	85	29,248,785	4,359	424,730,153,278	10.00%	75.97%	30,000,000
KRW-USD_<1 week	10%	49	72,523,272	34	30,701,182,925	9.97%	90.39%	75,000,000
KRW-USD_1 week	10%	53	54,392,454	39	48,027,026,528	9.97%	92.53%	55,000,000
KRW-USD_1 month	10%	63	37,244,561	94	145,418,922,677	9.98%	95.83%	35,000,000
KRW-USD_3 months	10%	68	19,581,283	344	671,786,057,370	10.01%	98.52%	20,000,000
KRW-USD_6 months	10%	49	563,568,716	17	47,413,277,377	10.12%	91.53%	575,000,000
MXN-USD_<1 week	10%	74	1,875,436	501	3,734,412,066	10.00%	92.25%	2,000,000
MXN-USD_1 week	10%	43	9,344,007	27	463,780,116	10.00%	54.45%	9,500,000
MXN-USD_1 month	10%	60	2,551,369	41	509,640,726	10.07%	84.55%	2,500,000
MXN-USD_3 months	10%	59	6,722,579	36	585,497,471	10.00%	66.35%	6,500,000
MXN-USD_6 months	10%	54	2,220,010	104	1,261,581,938	9.96%	70.96%	2,000,000
MYR-USD_<1 week	10%	34	15,113,291	24	722,373,497	10.04%	53.36%	15,000,000
MYR-USD_1 week	10%	48	31,910,240	21	1,227,569,996	9.86%	44.36%	30,000,000
MYR-USD_1 month	10%	58	20,381,226	47	1,758,819,856	9.92%	46.56%	20,000,000
MYR-USD_3 months	10%	65	14,504,654	181	4,457,302,951	9.99%	43.56%	15,000,000
NOK-USD_<1 week	10%	75	580,186	502	2,558,278,340	10.00%	95.65%	600,000

LIS calculations on the basis of 10% of trades above LIS rule								
NON-DELIVERABLE FORWARDS (NDF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
NOK-USD_1 week	10%	37	14,085,359	19	3,459,440,941	9.95%	92.71%	15,000,000
NOK-USD_1 month	10%	57	3,708,407	32	2,239,205,093	10.09%	97.27%	3,500,000
NOK-USD_3 months	10%	53	217,569,815	21	6,554,386,927	9.95%	72.94%	225,000,000
NOK-USD_6 months	10%	67	2,163,347	87	1,061,084,389	10.02%	77.94%	2,000,000
NZD-USD_<1 week	10%	78	24,893	32,013	2,819,360,651	10.00%	71.38%	20,000
NZD-USD_1 week	10%	51	62,909	504	262,949,819	10.01%	90.23%	60,000
NZD-USD_1 month	10%	78	6,223	4,506	674,793,231	10.00%	92.47%	10,000
NZD-USD_3 months	10%	55	647,293	48	400,186,480	10.11%	95.29%	600,000
NZD-USD_6 months	10%	75	54,082	1,568	519,854,316	10.00%	78.20%	50,000
PHP-USD_<1 week	10%	32	10,599,652	16	982,187,635	10.13%	75.38%	10,000,000
PHP-USD_1 week	10%	27	11,585,499	9	151,485,811	9.57%	41.85%	10,000,000
PHP-USD_1 month	10%	55	17,405,585	43	3,942,407,774	9.93%	78.64%	15,000,000
PHP-USD_3 months	10%	65	7,977,560	140	7,618,042,961	9.98%	72.15%	8,000,000
RUB-USD_<1 week	10%	72	436,607	304	2,740,562,723	9.99%	97.51%	400,000
RUB-USD_1 week	10%	47	24,657,912	21	985,416,718	10.14%	66.94%	25,000,000
RUB-USD_1 month	10%	64	3,626,164	76	1,283,235,954	10.03%	83.89%	3,500,000
RUB-USD_3 months	10%	56	14,504,654	98	3,001,229,340	10.01%	72.90%	15,000,000
RUB-USD_6 months	10%	60	10,009,720	294	9,512,991,973	10.00%	66.81%	10,000,000
SEK-USD_<1 week	10%	76	468,600	345	1,298,734,961	10.01%	97.47%	500,000
SEK-USD_1 week	10%	46	13,254,151	24	1,897,524,980	9.84%	86.93%	15,000,000
SEK-USD_1 month	10%	65	7,865,874	34	1,579,643,116	10.15%	86.93%	8,000,000
SEK-USD_3 months	10%	54	9,440,814	22	2,458,637,530	9.95%	90.99%	9,500,000
SEK-USD_6 months	10%	57	237,514	382	1,419,377,813	10.01%	92.38%	200,000
TRY-USD_<1 week	10%	78	1,579,455	881	1,862,237,227	10.00%	47.04%	1,500,000
TRY-USD_1 week	10%	42	1,028,380	31	230,355,714	9.87%	88.31%	1,000,000
TRY-USD_1 month	10%	65	1,087,849	81	580,506,602	10.05%	88.42%	1,000,000
TRY-USD_3 months	10%	54	6,599,618	38	595,170,859	10.03%	73.86%	6,500,000
TRY-USD_6 months	10%	63	455,820	398	576,628,256	10.00%	70.70%	500,000
TWD-USD_<1 week	10%	35	16,165,685	16	610,465,566	10.19%	56.48%	15,000,000
TWD-USD_1 week	10%	39	21,337,261	19	1,060,458,266	10.27%	50.19%	20,000,000
TWD-USD_1 month	10%	61	21,031,749	55	2,643,574,085	10.05%	50.76%	20,000,000
TWD-USD_3 months	10%	64	17,405,585	124	6,157,486,862	9.98%	56.47%	15,000,000
TWD-USD_6 months	10%	32	36,261,636	10	970,005,287	10.42%	45.38%	35,000,000
USD-XAU_<1 week	10%	74	27,748	2,120	14,461,153,447	10.00%	99.31%	30,000
USD-XAU_1 week	10%	33	12,024	202	747,567,384	10.00%	99.34%	10,000
USD-XAU_1 month	10%	75	9,249	1,134	13,325,891,385	10.00%	99.82%	10,000
USD-XAU_3 months	10%	41	120,894,029	28	20,788,898,701	10.18%	82.56%	125,000,000
USD-XAU_6 months	10%	82	119,446,775	3,668	1,621,711,371,622	10.00%	76.48%	125,000,000
USD-XAU_1 year	10%	70	46,247	780	5,175,037,857	10.00%	99.29%	50,000
USD-ZAR_<1 week	10%	75	7,779,644	540	4,292,843,729	10.00%	36.06%	8,000,000
USD-ZAR_1 week	10%	54	7,927,736	80	1,137,122,992	9.99%	37.78%	8,000,000
USD-ZAR_1 month	10%	61	1,087,849	75	1,158,525,418	10.04%	93.37%	1,000,000
USD-ZAR_3 months	10%	53	9,134,914	43	1,768,561,170	9.98%	83.58%	9,000,000
USD-ZAR_6 months	10%	62	1,889,993	124	546,591,064	10.04%	57.75%	2,000,000
ALL_OTHERS	10%	91	121,350	38,782	1,306,082,725,451	10.00%	99.72%	100,000
ALL_OTHERS	30%	91	10,043	116,346	1,308,986,660,434	30.00%	99.94%	10,000

Table 10: Non-deliverable Forwards (NDF) - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-EUR <1 week	30%	742,310	276	837,584,619	0.26%	30.02%	700,000
AUD-EUR 1 week	30%	105,860,469	1	235,228,413	0.02%	43.07%	100,000,000
AUD-EUR 1 month	30%	20,085,417	6	188,802,920	0.03%	32.73%	20,000,000
AUD-EUR 3 months	30%	48,333,169	6	525,768,163	0.74%	32.15%	50,000,000
AUD-EUR 6 months	30%	2,212,950	62	303,624,580	0.69%	30.04%	2,000,000
AUD-GBP <1 week	30%	50,213,543	8	732,206,195	0.01%	30.32%	50,000,000
AUD-GBP 1 week	30%	108,400,033	6	759,393,286	0.20%	32.49%	100,000,000
AUD-GBP 1 month	30%	47,535,487	7	425,737,169	0.04%	31.49%	50,000,000
AUD-GBP 3 months	30%	108,332,991	10	1,087,059,658	2.72%	32.09%	100,000,000
AUD-GBP 6 months	30%	5,682,341	13	225,509,437	0.33%	30.05%	5,500,000
AUD-JPY <1 week	30%	63,410,331	76	5,045,811,261	0.16%	30.37%	65,000,000
AUD-JPY 1 week	30%	85,895,776	8	834,418,391	0.55%	31.12%	85,000,000
AUD-JPY 1 month	30%	73,646,529	4	355,479,932	0.06%	34.52%	75,000,000
AUD-JPY 3 months	30%	91,908,396	5	656,173,266	1.55%	30.55%	90,000,000
AUD-JPY 6 months	30%	127,454,022	117	21,982,686,842	1.26%	30.14%	125,000,000
AUD-USD <1 week	30%	535,611	4,047	5,847,182,113	0.48%	30.00%	500,000
AUD-USD 1 week	30%	268,843,414	6	1,643,594,651	0.04%	31.10%	275,000,000
AUD-USD 1 month	30%	218,817,002	3	1,464,831,388	0.00%	30.55%	225,000,000
AUD-USD 3 months	30%	271,534,790	12	3,754,774,987	0.77%	32.04%	275,000,000
AUD-USD 6 months	30%	9,872,813	12	701,722,931	0.05%	30.31%	10,000,000
BRL-USD <1 week	30%	42,117,498	33	1,536,244,557	8.09%	30.44%	40,000,000
BRL-USD 1 week	30%	44,263,777	26	1,629,455,392	5.71%	30.19%	45,000,000
BRL-USD 1 month	30%	42,063,498	27	2,369,687,805	2.14%	30.44%	40,000,000
BRL-USD 3 months	30%	67,561,448	17	2,119,910,460	1.34%	30.24%	70,000,000
BRL-USD 6 months	30%	45,555,234	7	478,603,754	4.83%	30.12%	45,000,000
CAD-EUR <1 week	30%	1,522,200	58	311,091,787	0.15%	30.14%	1,500,000
CAD-EUR 1 week	30%	20,116,110	2	100,971,935	0.11%	33.08%	20,000,000
CAD-EUR 1 month	30%	11,212,909	8	199,563,627	0.12%	31.35%	10,000,000
CAD-EUR 3 months	30%	41,909,897	5	382,350,758	0.64%	32.03%	40,000,000
CAD-EUR 6 months	30%	1,171,293	89	222,325,110	0.93%	30.02%	1,000,000
CAD-GBP <1 week	30%	29,211,283	10	589,349,478	0.02%	30.56%	30,000,000
CAD-GBP 1 week	30%	77,637,804	6	529,586,468	0.15%	30.86%	80,000,000
CAD-GBP 1 month	30%	10,421,410	7	135,842,589	0.07%	32.23%	10,000,000
CAD-GBP 3 months	30%	77,110,943	11	863,404,868	3.00%	30.53%	75,000,000
CAD-USD <1 week	30%	435,140	2,133	2,219,961,164	0.60%	30.00%	400,000
CAD-USD 1 week	30%	15,170,406	8	187,010,630	0.12%	31.29%	15,000,000
CAD-USD 1 month	30%	22,033,401	7	254,910,313	0.02%	32.82%	20,000,000
CAD-USD 3 months	30%	221,325,677	5	1,108,991,009	0.36%	37.08%	225,000,000
CAD-USD 6 months	30%	1,597,934	82	333,273,274	0.59%	30.04%	1,500,000
CHF-EUR <1 week	30%	1,010,000	637	1,561,350,488	0.58%	30.02%	1,000,000
CHF-EUR 1 week	30%	34,059,923	8	517,534,025	0.21%	31.80%	35,000,000
CHF-EUR 1 month	30%	101,076,529	4	962,464,175	0.04%	31.15%	100,000,000
CHF-EUR 3 months	30%	98,910,000	12	2,364,538,983	0.82%	31.29%	100,000,000
CHF-EUR 6 months	30%	81,541,061	7	1,161,054,387	0.04%	31.68%	80,000,000
CHF-GBP <1 week	30%	27,698,735	5	617,675,636	0.01%	30.82%	30,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CHF-GBP_1 w week	30%	132,203,947	6	1,006,756,124	0.34%	31.87%	125,000,000
CHF-GBP_1 month	30%	123,049,891	3	578,328,054	0.04%	30.38%	125,000,000
CHF-GBP_3 months	30%	132,110,729	9	1,765,643,201	1.65%	30.90%	125,000,000
CHF-GBP_6 months	30%	6,332,668	16	324,328,691	0.28%	30.52%	6,500,000
CHF-JPY_<1 w week	30%	189,290,108	2	836,333,134	0.01%	32.78%	200,000,000
CHF-JPY_1 w week	30%	207,843,233	1	207,843,233	0.19%	49.16%	200,000,000
CHF-JPY_1 month	30%	186,230,267	1	186,230,267	0.02%	36.91%	175,000,000
CHF-JPY_3 months	30%	47,662,145	6	292,453,872	5.50%	34.24%	50,000,000
CHF-JPY_6 months	30%	47,633,023	70	5,871,903,453	2.05%	30.11%	50,000,000
CHF-USD_<1 w week	30%	974,713	492	2,339,101,556	0.15%	30.00%	1,000,000
CHF-USD_1 w week	30%	360,333,394	6	3,033,680,499	0.09%	31.60%	350,000,000
CHF-USD_1 month	30%	321,402,507	3	2,011,179,959	0.01%	33.17%	325,000,000
CHF-USD_3 months	30%	290,394,994	12	4,771,730,200	0.69%	31.46%	300,000,000
CHF-USD_6 months	30%	82,033,261	5	471,142,042	0.03%	30.49%	80,000,000
CLP-USD_1 month	30%	58,018,617	3	556,438,429	1.82%	30.73%	60,000,000
CLP-USD_3 months	30%	59,831,699	18	2,218,452,634	2.09%	30.74%	60,000,000
CLP-USD_6 months	30%	2,583,127,012	-	5,166,254,024	0.00%	44.83%	2,575,000,000
CNY-EUR_1 month	30%	35,197,427	3	262,317,349	1.70%	30.92%	35,000,000
CNY-EUR_3 months	30%	106,334,558	4	544,689,374	1.59%	32.90%	100,000,000
CNY-USD_<1 w week	30%	35,976,672	13	846,259,754	0.30%	30.57%	35,000,000
CNY-USD_1 w week	30%	43,513,963	20	1,164,337,872	5.46%	30.52%	45,000,000
CNY-USD_1 month	30%	36,261,636	64	3,717,420,908	5.29%	30.20%	35,000,000
CNY-USD_3 months	30%	36,261,636	65	5,450,234,730	3.69%	30.16%	35,000,000
CNY-USD_6 months	30%	63,952,954	13	1,408,585,885	3.10%	31.32%	65,000,000
CNY-USD_1 year	30%	36,261,636	24	2,332,968,817	2.43%	30.31%	35,000,000
CNY-USD_2 years	30%	21,756,982	85	2,033,613,832	8.44%	30.32%	20,000,000
COP-USD_<1 w week	30%	8,512,120,229	-	8,512,120,229	0.00%	66.96%	8,500,000,000
COP-USD_1 w week	30%	7,667,667,955	2	7,667,667,955	3.39%	33.90%	7,675,000,000
COP-USD_1 month	30%	7,679,687,237	1	7,679,687,237	0.88%	34.70%	7,675,000,000
COP-USD_3 months	30%	895,321,547	2	2,274,597,414	0.68%	30.88%	900,000,000
CZK-EUR_1 month	30%	114,921,561	2	690,086,559	0.51%	32.44%	125,000,000
CZK-EUR_3 months	30%	65,549,891	8	730,871,599	1.68%	31.85%	65,000,000
CZK-EUR_6 months	30%	593,719,420	-	593,719,420	0.00%	48.34%	600,000,000
DKK-EUR_<1 w week	30%	47,000,000	3	357,000,000	1.10%	33.90%	45,000,000
DKK-EUR_1 w week	30%	200,000,000	2	750,000,000	0.95%	39.93%	200,000,000
DKK-EUR_1 month	30%	200,000,000	3	1,114,727,680	0.94%	34.56%	200,000,000
DKK-EUR_3 months	30%	249,235,985	5	2,152,431,900	2.21%	30.04%	250,000,000
DKK-EUR_6 months	30%	200,000,000	1	550,000,000	1.33%	35.42%	200,000,000
DKK-GBP_1 w week	30%	291,240,302	2	588,627,696	1.19%	44.93%	300,000,000
DKK-GBP_1 month	30%	121,350,126	3	604,566,327	1.21%	31.30%	125,000,000
DKK-GBP_3 months	30%	53,653,000	5	626,737,656	1.92%	31.61%	55,000,000
DKK-USD_<1 w week	30%	267,934,255	-	267,934,255	0.00%	31.06%	275,000,000
DKK-USD_1 w week	30%	267,934,255	3	1,641,097,312	1.32%	31.21%	275,000,000
DKK-USD_1 month	30%	267,934,255	7	3,041,806,498	0.73%	32.06%	275,000,000
DKK-USD_3 months	30%	267,934,255	12	4,701,389,919	1.12%	31.01%	275,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
DKK-USD_6 months	30%	200,950,691	6	1,996,245,992	0.68%	32.55%	200,000,000
DKK-USD_1 year	30%	482,279,757	1	964,922,131	0.48%	31.37%	475,000,000
EUR-GBP_<1 week	30%	833,816,667	8	7,841,252,149	0.00%	32.03%	825,000,000
EUR-GBP_1 week	30%	271,000,000	12	4,726,432,140	0.19%	31.10%	275,000,000
EUR-GBP_1 month	30%	785,394,524	9	8,611,451,618	0.04%	32.42%	775,000,000
EUR-GBP_3 months	30%	269,600,000	29	11,099,544,108	0.78%	30.38%	275,000,000
EUR-GBP_6 months	30%	88,537,002	17	3,278,579,340	0.15%	30.53%	90,000,000
EUR-GBP_1 year	30%	140,000,000	2	721,536,430	0.08%	33.92%	150,000,000
EUR-GBP_2 years	30%	30,508,268	3	272,250,837	0.95%	30.11%	30,000,000
EUR-GBP_3 years	30%	32,764,534	8	232,992,242	12.12%	31.80%	35,000,000
EUR-HUF_<1 week	30%	3,928,852,992	2	15,374,297,088	0.06%	36.11%	3,925,000,000
EUR-HUF_1 week	30%	4,147,157,175	1	10,769,358,788	0.34%	47.54%	4,150,000,000
EUR-HUF_1 month	30%	3,052,905,972	2	9,158,955,138	0.12%	30.04%	3,050,000,000
EUR-HUF_3 months	30%	4,150,124,247	3	22,257,730,734	0.31%	35.93%	4,150,000,000
EUR-HUF_6 months	30%	303,765,000	75	27,906,777,195	3.12%	30.02%	300,000,000
EUR-HUF_1 year	30%	318,300,000	-	318,300,000	0.00%	38.92%	325,000,000
EUR-JPY_<1 week	30%	129,041,100	301	44,992,513,427	0.04%	30.08%	125,000,000
EUR-JPY_1 week	30%	138,849,000	64	10,906,684,430	0.69%	30.11%	150,000,000
EUR-JPY_1 month	30%	305,101,349	7	3,828,268,349	0.01%	30.77%	300,000,000
EUR-JPY_3 months	30%	313,000,000	7	4,423,852,891	0.35%	31.89%	325,000,000
EUR-JPY_6 months	30%	212,481,000	194	81,607,140,175	0.83%	30.07%	200,000,000
EUR-NOK_<1 week	30%	8,264,200	124	1,085,436,596	4.99%	30.16%	8,500,000
EUR-NOK_1 week	30%	331,497,260	-	331,497,260	0.00%	31.82%	325,000,000
EUR-NOK_1 month	30%	327,105,820	2	654,211,639	0.28%	41.15%	325,000,000
EUR-NOK_3 months	30%	140,000,000	3	752,105,820	0.53%	34.29%	150,000,000
EUR-NOK_6 months	30%	15,000,000	38	1,265,222,356	1.33%	30.01%	15,000,000
EUR-PLN_<1 week	30%	4,212,130	27	201,223,157	3.04%	30.46%	4,000,000
EUR-PLN_1 week	30%	56,828,554	1	116,522,413	0.59%	33.44%	55,000,000
EUR-PLN_1 month	30%	14,331,575	8	265,479,774	2.01%	30.15%	15,000,000
EUR-PLN_3 months	30%	29,846,930	6	304,279,419	1.69%	30.57%	30,000,000
EUR-PLN_6 months	30%	14,300,355	19	404,412,019	1.51%	30.56%	15,000,000
EUR-SEK_<1 week	30%	9,026,010	167	2,054,768,286	6.35%	30.12%	9,000,000
EUR-SEK_1 week	30%	50,000,000	3	469,055,610	0.59%	30.62%	50,000,000
EUR-SEK_1 month	30%	65,004,074	7	1,031,096,660	0.76%	31.81%	65,000,000
EUR-SEK_3 months	30%	300,672,923	3	1,212,451,555	0.55%	35.56%	300,000,000
EUR-SEK_6 months	30%	9,034,280	69	986,809,713	2.24%	30.10%	9,000,000
EUR-USD_<1 week	30%	200,000,000	183	71,334,188,502	0.00%	30.08%	200,000,000
EUR-USD_1 week	30%	372,603,714	17	12,723,715,599	0.02%	30.68%	375,000,000
EUR-USD_1 month	30%	645,294,665	31	26,595,437,287	0.01%	30.21%	650,000,000
EUR-USD_3 months	30%	384,235,000	28	23,252,802,954	0.15%	30.25%	375,000,000
EUR-USD_6 months	30%	25,614,754	158	12,604,126,741	0.12%	30.01%	25,000,000
EUR-USD_1 year	30%	58,648,447	21	1,899,957,811	0.05%	30.81%	60,000,000
EUR-USD_2 years	30%	22,000,000	14	651,199,663	1.21%	30.34%	20,000,000
EUR-USD_3 years	30%	48,000,000	6	366,000,000	3.49%	33.90%	50,000,000
GBP-HKD_1 week	30%	46,507,136	7	329,535,910	4.35%	30.65%	45,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
GBP-HKD_1 month	30%	20,830,402	7	227,146,763	2.58%	30.78%	20,000,000
GBP-HKD_3 months	30%	46,742,819	10	527,941,565	4.48%	30.71%	45,000,000
GBP-HUF_<1 w week	30%	933,374,201	2	1,866,748,402	1.08%	52.62%	925,000,000
GBP-HUF_1 w week	30%	1,774,064,675	1	1,774,064,675	4.35%	99.12%	1,775,000,000
GBP-HUF_1 month	30%	1,174,694,338	2	2,349,388,676	1.50%	57.56%	1,175,000,000
GBP-HUF_3 months	30%	934,810,161	-	1,869,620,323	0.00%	52.22%	925,000,000
GBP-HUF_6 months	30%	452,972,109	2	2,688,915,590	1.04%	30.17%	450,000,000
GBP-JPY_<1 w week	30%	90,863,637	75	14,672,189,591	0.01%	30.13%	90,000,000
GBP-JPY_1 w week	30%	221,545,820	16	4,602,417,988	0.16%	31.41%	225,000,000
GBP-JPY_1 month	30%	107,424,057	16	2,165,707,222	0.02%	31.02%	100,000,000
GBP-JPY_3 months	30%	272,920,366	13	5,431,764,879	1.20%	30.08%	275,000,000
GBP-JPY_6 months	30%	626,403,282	103	91,119,088,632	0.76%	30.08%	625,000,000
GBP-NOK_3 months	30%	46,949,070	3	278,002,072	2.46%	31.83%	45,000,000
GBP-NOK_6 months	30%	6,461,308	18	300,972,006	2.59%	30.33%	6,500,000
GBP-SEK_1 w week	30%	56,882,184	3	236,856,556	1.28%	31.13%	55,000,000
GBP-SEK_1 month	30%	37,256,837	3	173,685,906	1.06%	32.68%	35,000,000
GBP-SEK_3 months	30%	56,855,410	8	533,774,177	5.23%	33.40%	55,000,000
GBP-USD_<1 w week	30%	120,678,724	161	33,398,661,383	0.01%	30.10%	125,000,000
GBP-USD_1 w week	30%	485,400,503	13	10,280,470,956	0.06%	30.09%	475,000,000
GBP-USD_1 month	30%	161,001,663	52	12,444,191,997	0.04%	30.14%	150,000,000
GBP-USD_3 months	30%	648,536,661	25	23,064,764,482	0.39%	30.75%	650,000,000
GBP-USD_6 months	30%	120,051,362	51	9,319,199,448	0.10%	30.26%	125,000,000
GBP-USD_1 year	30%	208,002,787	4	1,157,277,629	0.02%	31.56%	200,000,000
HUF-USD_<1 w week	30%	1,650,107,498	2	5,271,165,449	0.11%	37.35%	1,650,000,000
HUF-USD_1 w week	30%	895,103,970	2	2,520,604,322	2.50%	39.79%	900,000,000
HUF-USD_1 month	30%	1,289,035,308	1	2,762,419,400	0.28%	34.12%	1,300,000,000
HUF-USD_3 months	30%	1,393,936,141	3	5,702,237,669	0.84%	36.11%	1,400,000,000
HUF-USD_6 months	30%	159,105,180	41	7,259,288,469	3.23%	30.08%	150,000,000
IDR-USD_<1 w week	30%	41,519,573,093	1	41,519,573,093	0.53%	58.45%	41,525,000,000
IDR-USD_1 w week	30%	41,566,713,220	-	41,566,713,220	0.00%	70.49%	41,575,000,000
IDR-USD_1 month	30%	25,383,145,123	1	98,662,853,939	0.28%	36.25%	25,375,000,000
IDR-USD_3 months	30%	48,841,159,996	3	240,962,559,265	0.23%	33.01%	48,850,000,000
IDR-USD_6 months	30%	22,482,214,251	2	47,685,501,660	1.02%	40.81%	22,475,000,000
INR-USD_<1 w week	30%	442,464,481	3	2,080,286,537	0.37%	31.31%	450,000,000
INR-USD_1 w week	30%	399,448,753	4	3,602,584,098	0.64%	30.02%	400,000,000
INR-USD_1 month	30%	355,731,406	8	5,481,215,007	0.41%	31.16%	350,000,000
INR-USD_3 months	30%	36,261,636	90	11,565,604,095	1.08%	30.08%	35,000,000
INR-USD_6 months	30%	54,392,454	14	1,150,843,957	3.57%	30.76%	55,000,000
INR-USD_1 year	30%	44,964,429	14	834,794,987	8.14%	30.22%	45,000,000
INR-USD_2 years	30%	16,680,353	11	258,301,396	12.79%	30.37%	15,000,000
JPY-NZD_<1 w week	30%	55,186,690	33	2,029,884,369	0.15%	30.54%	55,000,000
JPY-NZD_1 w week	30%	108,444,146	3	393,515,068	0.49%	32.00%	100,000,000
JPY-NZD_1 month	30%	55,413,220	-	55,413,220	0.00%	35.64%	55,000,000
JPY-NZD_3 months	30%	144,469,667	1	144,469,667	1.47%	35.95%	150,000,000
JPY-NZD_6 months	30%	27,488,171	27	1,593,237,787	0.74%	30.33%	25,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
JPY-USD <1 w week	30%	74,067,292	1,134	98,497,971,453	0.10%	30.01%	75,000,000
JPY-USD 1 w week	30%	26,029,704,595	1	26,029,704,595	0.01%	30.01%	26,025,000,000
JPY-USD 1 month	30%	33,151,863,379	2	66,404,603,002	0.00%	37.13%	33,150,000,000
JPY-USD 3 months	30%	9,666,189,580	1	19,332,956,445	0.04%	36.59%	9,675,000,000
JPY-USD 6 months	30%	221,203,231	411	167,835,500,915	0.94%	30.02%	225,000,000
KRW-USD <1 w week	30%	5,654,714,200	1	12,177,850,339	0.29%	35.85%	5,650,000,000
KRW-USD 1 w week	30%	6,804,495,975	2	20,204,620,901	0.51%	38.93%	6,800,000,000
KRW-USD 1 month	30%	19,756,789,698	1	59,976,745,761	0.11%	39.53%	19,750,000,000
KRW-USD 3 months	30%	11,914,471,200	12	207,235,292,622	0.35%	30.39%	11,925,000,000
KRW-USD 6 months	30%	21,611,934,990	-	21,611,934,990	0.00%	41.72%	21,600,000,000
MXN-USD <1 w week	30%	9,572,847	86	1,220,898,092	1.72%	30.16%	9,500,000
MXN-USD 1 w week	30%	12,448,707	6	265,170,831	2.22%	31.13%	10,000,000
MXN-USD 1 month	30%	28,766,224	3	199,342,423	0.74%	33.07%	30,000,000
MXN-USD 3 months	30%	22,936,935	7	265,029,699	1.94%	30.03%	25,000,000
MXN-USD 6 months	30%	28,105,886	11	545,010,223	1.05%	30.66%	30,000,000
MYR-USD <1 w week	30%	24,637,726	9	414,514,770	3.77%	30.62%	25,000,000
MYR-USD 1 w week	30%	44,239,196	11	859,208,470	5.16%	31.05%	45,000,000
MYR-USD 1 month	30%	29,009,309	20	1,151,164,254	4.22%	30.48%	30,000,000
MYR-USD 3 months	30%	19,581,283	90	3,080,110,427	4.97%	30.10%	20,000,000
NOK-USD <1 w week	30%	364,496,476	2	850,491,776	0.04%	31.80%	375,000,000
NOK-USD 1 w week	30%	485,995,301	1	1,154,238,839	0.52%	30.93%	475,000,000
NOK-USD 1 month	30%	364,496,476	2	872,159,378	0.63%	37.89%	375,000,000
NOK-USD 3 months	30%	295,242,145	9	2,751,510,860	4.27%	30.62%	300,000,000
NOK-USD 6 months	30%	60,749,413	3	448,793,607	0.35%	32.97%	60,000,000
NZD-USD <1 w week	30%	186,700	2,523	1,185,073,287	0.79%	30.00%	200,000
NZD-USD 1 w week	30%	4,299,231	4	87,558,152	0.08%	30.05%	4,500,000
NZD-USD 1 month	30%	236,062,523	-	236,062,523	0.00%	32.35%	225,000,000
NZD-USD 3 months	30%	39,202,502	2	149,902,893	0.42%	35.70%	40,000,000
NZD-USD 6 months	30%	1,069,281	91	200,282,809	0.58%	30.13%	1,000,000
PHP-USD <1 w week	30%	645,761,717	1	645,761,717	0.63%	49.56%	650,000,000
PHP-USD 1 w week	30%	16,859,104	5	115,242,399	5.32%	31.84%	15,000,000
PHP-USD 1 month	30%	802,288,694	2	1,753,395,142	0.46%	34.98%	800,000,000
PHP-USD 3 months	30%	329,811,182	7	3,274,651,993	0.50%	31.02%	325,000,000
RUB-USD <1 w week	30%	69,109,048	8	864,784,800	0.26%	30.77%	70,000,000
RUB-USD 1 w week	30%	45,161,569	7	444,810,639	3.38%	30.22%	45,000,000
RUB-USD 1 month	30%	36,261,636	5	480,762,062	0.66%	31.43%	35,000,000
RUB-USD 3 months	30%	36,261,636	16	1,258,044,966	1.63%	30.56%	35,000,000
RUB-USD 6 months	30%	52,117,834	39	4,293,137,815	1.33%	30.15%	50,000,000
SEK-USD <1 w week	30%	5,736,629	28	401,461,704	0.81%	30.13%	5,500,000
SEK-USD 1 w week	30%	167,120,978	2	798,615,448	0.82%	36.58%	175,000,000
SEK-USD 1 month	30%	280,698,066	1	566,912,684	0.30%	31.20%	275,000,000
SEK-USD 3 months	30%	287,225,032	2	865,507,736	0.90%	32.03%	275,000,000
SEK-USD 6 months	30%	19,228,501	10	476,486,047	0.26%	31.01%	20,000,000
TRY-USD <1 w week	30%	1,617,914	461	1,188,007,552	5.23%	30.01%	1,500,000
TRY-USD 1 w week	30%	19,408,907	3	79,666,079	0.96%	30.54%	20,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
NON-DELIVERABLE FORWARDS (NDF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
TRY-USD_1 month	30%	25,347,023	4	207,288,848	0.50%	31.57%	25,000,000
TRY-USD_3 months	30%	19,549,302	11	255,493,154	2.90%	31.71%	20,000,000
TRY-USD_6 months	30%	1,990,425	63	245,845,174	1.58%	30.14%	2,000,000
TWD-USD_<1 week	30%	26,108,378	4	334,505,462	2.55%	30.95%	25,000,000
TWD-USD_1 week	30%	58,018,617	2	666,351,388	1.08%	31.54%	60,000,000
TWD-USD_1 month	30%	39,887,799	18	1,589,556,280	3.29%	30.52%	40,000,000
TWD-USD_3 months	30%	58,018,617	25	3,284,714,616	2.01%	30.13%	60,000,000
TWD-USD_6 months	30%	72,444,221	2	662,506,615	2.08%	31.00%	70,000,000
USD-XAU_<1 week	30%	636,164,606	5	4,474,171,508	0.02%	30.73%	625,000,000
USD-XAU_1 week	30%	300,552,374	1	300,552,374	0.05%	39.94%	300,000,000
USD-XAU_1 month	30%	871,235,378	3	4,071,386,883	0.03%	30.50%	875,000,000
USD-XAU_3 months	30%	1,220,445,618	3	7,890,053,193	1.09%	31.33%	1,225,000,000
USD-XAU_6 months	30%	1,190,592,248	414	637,004,166,791	1.13%	30.04%	1,200,000,000
USD-XAU_1 year	30%	4,516,731,234	-	4,516,731,234	0.00%	86.66%	4,525,000,000
USD-ZAR_<1 week	30%	7,788,419	448	3,576,692,977	8.30%	30.04%	8,000,000
USD-ZAR_1 week	30%	7,940,791	50	907,048,054	6.24%	30.14%	8,000,000
USD-ZAR_1 month	30%	80,307,164	4	429,175,763	0.54%	34.59%	80,000,000
USD-ZAR_3 months	30%	80,378,878	8	695,012,286	1.86%	32.85%	80,000,000
USD-ZAR_6 months	30%	4,577,865	23	288,223,048	1.86%	30.45%	4,500,000
ALL_OTHERS	30%	23,995,603,167	8	404,334,996,584	0.00%	30.87%	24,000,000,000

Table 11: Non-deliverable Forwards (NDF) - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
AUD-EUR <1 w eek	50,000	742,310	742,310	700,000	1,000,000
AUD-EUR 1 w eek	29,903	105,860,469	105,860,469	100,000,000	1,000,000
AUD-EUR 1 month	10,000	20,085,417	20,085,417	20,000,000	1,000,000
AUD-EUR 3 months	3,439,816	48,333,169	48,333,169	50,000,000	3,500,000
AUD-EUR 6 months	192,576	2,212,950	2,212,950	2,000,000	1,000,000
AUD-GBP <1 w eek	36,405	50,213,543	50,213,543	50,000,000	1,000,000
AUD-GBP 1 w eek	46,113	108,400,033	108,400,033	100,000,000	1,000,000
AUD-GBP 1 month	12,135	47,535,487	47,535,487	50,000,000	1,000,000
AUD-GBP 3 months	20,068,679	108,332,991	108,332,991	100,000,000	20,000,000
AUD-GBP 6 months	325,592	5,682,341	5,682,341	5,500,000	1,000,000
AUD-JPY <1 w eek	26,781	63,410,331	63,410,331	65,000,000	1,000,000
AUD-JPY 1 w eek	3,777,625	85,895,776	85,895,776	85,000,000	4,000,000
AUD-JPY 1 month	6,695	73,646,529	73,646,529	75,000,000	1,000,000
AUD-JPY 3 months	8,413,519	91,908,396	91,908,396	90,000,000	8,500,000
AUD-JPY 6 months	15,840,197	127,454,022	127,454,022	125,000,000	15,000,000
AUD-USD <1 w eek	40,171	535,611	535,611	500,000	1,000,000
AUD-USD 1 w eek	43,317	268,843,414	268,843,414	275,000,000	1,000,000
AUD-USD 1 month	6,695	218,817,002	218,817,002	225,000,000	1,000,000
AUD-USD 3 months	6,189,359	271,534,790	271,534,790	275,000,000	6,000,000
AUD-USD 6 months	120,862	9,872,813	9,872,813	10,000,000	1,000,000
BRL-USD <1 w eek	39,887,799	42,117,498	42,117,498	40,000,000	40,000,000
BRL-USD 1 w eek	37,734,174	44,263,777	44,263,777	45,000,000	40,000,000
BRL-USD 1 month	16,680,353	42,063,498	42,063,498	40,000,000	15,000,000
BRL-USD 3 months	13,964,715	67,561,448	67,561,448	70,000,000	15,000,000
BRL-USD 6 months	34,811,170	45,555,234	45,555,234	45,000,000	35,000,000
CAD-EUR <1 w eek	45,000	1,522,200	1,522,200	1,500,000	1,000,000
CAD-EUR 1 w eek	50,000	20,116,110	20,116,110	20,000,000	1,000,000
CAD-EUR 1 month	30,000	11,212,909	11,212,909	10,000,000	1,000,000
CAD-EUR 3 months	2,756,397	41,909,897	41,909,897	40,000,000	3,000,000
CAD-EUR 6 months	152,266	1,171,293	1,171,293	1,000,000	1,000,000
CAD-GBP <1 w eek	36,405	29,211,283	29,211,283	30,000,000	1,000,000
CAD-GBP 1 w eek	12,135	77,637,804	77,637,804	80,000,000	1,000,000
CAD-GBP 1 month	12,135	10,421,410	10,421,410	10,000,000	1,000,000
CAD-GBP 3 months	29,195,606	77,110,943	77,110,943	75,000,000	30,000,000
CAD-USD <1 w eek	36,262	435,140	435,140	400,000	1,000,000
CAD-USD 1 w eek	7,252	15,170,406	15,170,406	15,000,000	1,000,000
CAD-USD 1 month	6,596	22,033,401	22,033,401	20,000,000	1,000,000
CAD-USD 3 months	902,082	221,325,677	221,325,677	225,000,000	1,000,000
CAD-USD 6 months	97,875	1,597,934	1,597,934	1,500,000	1,000,000
CHF-EUR <1 w eek	50,000	1,010,000	1,010,000	1,000,000	1,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
CHF-EUR__1 w eek	480,000	34,059,923	34,059,923	35,000,000	1,000,000
CHF-EUR__1 month	30,000	101,076,529	101,076,529	100,000,000	1,000,000
CHF-EUR__3 months	8,490,207	98,910,000	98,910,000	100,000,000	8,500,000
CHF-EUR__6 months	244,120	81,541,061	81,541,061	80,000,000	1,000,000
CHF-GBP__<1 w eek	24,270	27,698,735	27,698,735	30,000,000	1,000,000
CHF-GBP__1 w eek	217,217	132,203,947	132,203,947	125,000,000	1,000,000
CHF-GBP__1 month	12,135	123,049,891	123,049,891	125,000,000	1,000,000
CHF-GBP__3 months	17,541,227	132,110,729	132,110,729	125,000,000	20,000,000
CHF-GBP__6 months	355,968	6,332,668	6,332,668	6,500,000	1,000,000
CHF-JPY__<1 w eek	24,610	189,290,108	189,290,108	200,000,000	1,000,000
CHF-JPY__1 w eek	32,813	207,843,233	207,843,233	200,000,000	1,000,000
CHF-JPY__1 month	8,203	186,230,267	186,230,267	175,000,000	1,000,000
CHF-JPY__3 months	26,672,450	47,662,145	47,662,145	50,000,000	25,000,000
CHF-JPY__6 months	12,087,432	47,633,023	47,633,023	50,000,000	10,000,000
CHF-USD__<1 w eek	36,262	974,713	974,713	1,000,000	1,000,000
CHF-USD__1 w eek	36,262	360,333,394	360,333,394	350,000,000	1,000,000
CHF-USD__1 month	7,252	321,402,507	321,402,507	325,000,000	1,000,000
CHF-USD__3 months	12,073,308	290,394,994	290,394,994	300,000,000	10,000,000
CHF-USD__6 months	64,625	82,033,261	82,033,261	80,000,000	1,000,000
CLP-USD__1 month	23,207,447	58,018,617	58,018,617	60,000,000	25,000,000
CLP-USD__3 months	21,756,982	59,831,699	59,831,699	60,000,000	20,000,000
CLP-USD__6 months	173,975,351	2,583,127,012	2,583,127,012	2,575,000,000	175,000,000
CNY-EUR__1 month	14,316,916	35,197,427	35,197,427	35,000,000	15,000,000
CNY-EUR__3 months	13,562,354	106,334,558	106,334,558	100,000,000	15,000,000
CNY-USD__<1 w eek	36,262	35,976,672	35,976,672	35,000,000	1,000,000
CNY-USD__1 w eek	26,108,378	43,513,963	43,513,963	45,000,000	25,000,000
CNY-USD__1 month	29,009,309	36,261,636	36,261,636	35,000,000	30,000,000
CNY-USD__3 months	21,812,376	36,261,636	36,261,636	35,000,000	20,000,000
CNY-USD__6 months	28,493,029	63,952,954	63,952,954	65,000,000	30,000,000
CNY-USD__1 year	21,756,982	36,261,636	36,261,636	35,000,000	20,000,000
CNY-USD__2 years	17,584,882	21,756,982	21,756,982	20,000,000	20,000,000
COP-USD__<1 w eek	167,383,711	8,512,120,229	8,512,120,229	8,500,000,000	175,000,000
COP-USD__1 w eek	706,158,349	7,667,667,955	7,667,667,955	7,675,000,000	700,000,000
COP-USD__1 month	69,858,476	7,679,687,237	7,679,687,237	7,675,000,000	70,000,000
COP-USD__3 months	70,301,884	895,321,547	895,321,547	900,000,000	70,000,000
CZK-EUR__1 month	12,745,348	114,921,561	114,921,561	125,000,000	15,000,000
CZK-EUR__3 months	12,773,723	65,549,891	65,549,891	65,000,000	15,000,000
CZK-EUR__6 months	1,421,951	593,719,420	593,719,420	600,000,000	1,500,000
DKK-EUR__<1 w eek	7,464,750	47,000,000	47,000,000	45,000,000	7,500,000
DKK-EUR__1 w eek	7,466,130	200,000,000	200,000,000	200,000,000	7,500,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
DKK-EUR__1 month	14,500,000	200,000,000	200,000,000	200,000,000	15,000,000
DKK-EUR__3 months	100,000,000	249,235,985	249,235,985	250,000,000	100,000,000
DKK-EUR__6 months	89,807,902	200,000,000	200,000,000	200,000,000	90,000,000
DKK-GBP__1 w eek	20,942,686	291,240,302	291,240,302	300,000,000	20,000,000
DKK-GBP__1 month	23,056,524	121,350,126	121,350,126	125,000,000	25,000,000
DKK-GBP__3 months	23,056,524	53,653,000	53,653,000	55,000,000	25,000,000
DKK-USD__<1 w eek	72,523	267,934,255	267,934,255	275,000,000	1,000,000
DKK-USD__1 w eek	68,897,108	267,934,255	267,934,255	275,000,000	70,000,000
DKK-USD__1 month	14,504,654	267,934,255	267,934,255	275,000,000	15,000,000
DKK-USD__3 months	13,054,189	267,934,255	267,934,255	275,000,000	15,000,000
DKK-USD__6 months	3,935,309	200,950,691	200,950,691	200,000,000	4,000,000
DKK-USD__1 year	20,095,069	482,279,757	482,279,757	475,000,000	20,000,000
EUR-GBP__<1 w eek	20,000	833,816,667	833,816,667	825,000,000	1,000,000
EUR-GBP__1 w eek	884,826	271,000,000	271,000,000	275,000,000	1,000,000
EUR-GBP__1 month	145,620	785,394,524	785,394,524	775,000,000	1,000,000
EUR-GBP__3 months	18,000,000	269,600,000	269,600,000	275,000,000	20,000,000
EUR-GBP__6 months	405,505	88,537,002	88,537,002	90,000,000	1,000,000
EUR-GBP__1 year	800,000	140,000,000	140,000,000	150,000,000	1,000,000
EUR-GBP__2 years	7,000,000	30,508,268	30,508,268	30,000,000	7,000,000
EUR-GBP__3 years	32,764,534	32,764,534	32,764,534	35,000,000	35,000,000
EUR-HUF__<1 w eek	30,000	3,928,852,992	3,928,852,992	3,925,000,000	1,000,000
EUR-HUF__1 w eek	15,354,650	4,147,157,175	4,147,157,175	4,150,000,000	15,000,000
EUR-HUF__1 month	15,359,700	3,052,905,972	3,052,905,972	3,050,000,000	15,000,000
EUR-HUF__3 months	30,649,000	4,150,124,247	4,150,124,247	4,150,000,000	30,000,000
EUR-HUF__6 months	76,970,750	303,765,000	303,765,000	300,000,000	75,000,000
EUR-HUF__1 year	15,285,050	318,300,000	318,300,000	325,000,000	15,000,000
EUR-JPY__<1 w eek	80,000	129,041,100	129,041,100	125,000,000	1,000,000
EUR-JPY__1 w eek	2,836,100	138,849,000	138,849,000	150,000,000	3,000,000
EUR-JPY__1 month	13,000	305,101,349	305,101,349	300,000,000	1,000,000
EUR-JPY__3 months	11,027,338	313,000,000	313,000,000	325,000,000	10,000,000
EUR-JPY__6 months	20,869,650	212,481,000	212,481,000	200,000,000	20,000,000
EUR-NOK__<1 w eek	8,142,180	8,264,200	8,264,200	8,500,000	8,000,000
EUR-NOK__1 w eek	8,127,150	331,497,260	331,497,260	325,000,000	8,000,000
EUR-NOK__1 month	2,000,000	327,105,820	327,105,820	325,000,000	2,000,000
EUR-NOK__3 months	5,018,873	140,000,000	140,000,000	150,000,000	5,000,000
EUR-NOK__6 months	3,632,213	15,000,000	15,000,000	15,000,000	3,500,000
EUR-PLN__<1 w eek	4,185,260	4,212,130	4,212,130	4,000,000	4,000,000
EUR-PLN__1 w eek	4,639,407	56,828,554	56,828,554	55,000,000	4,500,000
EUR-PLN__1 month	5,729,975	14,331,575	14,331,575	15,000,000	5,500,000
EUR-PLN__3 months	7,137,634	29,846,930	29,846,930	30,000,000	7,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
EUR-PLN_6 months	2,070,150	14,300,355	14,300,355	15,000,000	2,000,000
EUR-SEK_<1 week	8,957,350	9,026,010	9,026,010	9,000,000	9,000,000
EUR-SEK_1 week	9,060,980	50,000,000	50,000,000	50,000,000	9,000,000
EUR-SEK_1 month	4,942,881	65,004,074	65,004,074	65,000,000	5,000,000
EUR-SEK_3 months	8,986,841	300,672,923	300,672,923	300,000,000	9,000,000
EUR-SEK_6 months	2,596,685	9,034,280	9,034,280	9,000,000	2,500,000
EUR-USD_<1 week	57,000	200,000,000	200,000,000	200,000,000	1,000,000
EUR-USD_1 week	30,000	372,603,714	372,603,714	375,000,000	1,000,000
EUR-USD_1 month	12,000	645,294,665	645,294,665	650,000,000	1,000,000
EUR-USD_3 months	2,001,509	384,235,000	384,235,000	375,000,000	2,000,000
EUR-USD_6 months	345,390	25,614,754	25,614,754	25,000,000	1,000,000
EUR-USD_1 year	100,000	58,648,447	58,648,447	60,000,000	1,000,000
EUR-USD_2 years	4,000,000	22,000,000	22,000,000	20,000,000	4,000,000
EUR-USD_3 years	19,039,400	48,000,000	48,000,000	50,000,000	20,000,000
GBP-HKD_1 week	41,323,812	46,507,136	46,507,136	45,000,000	40,000,000
GBP-HKD_1 month	8,399,868	20,830,402	20,830,402	20,000,000	8,500,000
GBP-HKD_3 months	45,724,696	46,742,819	46,742,819	45,000,000	45,000,000
GBP-HUF_<1 week	24,270	933,374,201	933,374,201	925,000,000	1,000,000
GBP-HUF_1 week	3,883,642	1,774,064,675	1,774,064,675	1,775,000,000	4,000,000
GBP-HUF_1 month	6,067,506	1,174,694,338	1,174,694,338	1,175,000,000	6,000,000
GBP-HUF_3 months	2,427,003	934,810,161	934,810,161	925,000,000	2,500,000
GBP-HUF_6 months	45,672,547	452,972,109	452,972,109	450,000,000	45,000,000
GBP-JPY_<1 week	99,507	90,863,637	90,863,637	90,000,000	1,000,000
GBP-JPY_1 week	30,338	221,545,820	221,545,820	225,000,000	1,000,000
GBP-JPY_1 month	14,562	107,424,057	107,424,057	100,000,000	1,000,000
GBP-JPY_3 months	33,205,622	272,920,366	272,920,366	275,000,000	35,000,000
GBP-JPY_6 months	22,457,302	626,403,282	626,403,282	625,000,000	20,000,000
GBP-NOK_3 months	24,299,765	46,949,070	46,949,070	45,000,000	25,000,000
GBP-NOK_6 months	3,058,418	6,461,308	6,461,308	6,500,000	3,000,000
GBP-SEK_1 week	5,031,907	56,882,184	56,882,184	55,000,000	5,000,000
GBP-SEK_1 month	5,431,747	37,256,837	37,256,837	35,000,000	5,500,000
GBP-SEK_3 months	45,546,069	56,855,410	56,855,410	55,000,000	45,000,000
GBP-USD_<1 week	60,675	120,678,724	120,678,724	125,000,000	1,000,000
GBP-USD_1 week	121,350	485,400,503	485,400,503	475,000,000	1,000,000
GBP-USD_1 month	12,135	161,001,663	161,001,663	150,000,000	1,000,000
GBP-USD_3 months	12,505,876	648,536,661	648,536,661	650,000,000	15,000,000
GBP-USD_6 months	406,125	120,051,362	120,051,362	125,000,000	1,000,000
GBP-USD_1 year	60,675	208,002,787	208,002,787	200,000,000	1,000,000
HUF-USD_<1 week	21,757	1,650,107,498	1,650,107,498	1,650,000,000	1,000,000
HUF-USD_1 week	226,614,918	895,103,970	895,103,970	900,000,000	225,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
HUF-USD_1 month	32,166,972	1,289,035,308	1,289,035,308	1,300,000,000	30,000,000
HUF-USD_3 months	40,593,088	1,393,936,141	1,393,936,141	1,400,000,000	40,000,000
HUF-USD_6 months	40,221,407	159,105,180	159,105,180	150,000,000	40,000,000
IDR-USD_<1 week	19,896,765	41,519,573,093	41,519,573,093	41,525,000,000	20,000,000
IDR-USD_1 week	14,686,492	41,566,713,220	41,566,713,220	41,575,000,000	15,000,000
IDR-USD_1 month	359,613,200	25,383,145,123	25,383,145,123	25,375,000,000	350,000,000
IDR-USD_3 months	10,878,491	48,841,159,996	48,841,159,996	48,850,000,000	10,000,000
IDR-USD_6 months	11,724,334	22,482,214,251	22,482,214,251	22,475,000,000	10,000,000
INR-USD_<1 week	14,115,137	442,464,481	442,464,481	450,000,000	15,000,000
INR-USD_1 week	27,452,234	399,448,753	399,448,753	400,000,000	25,000,000
INR-USD_1 month	14,504,654	355,731,406	355,731,406	350,000,000	15,000,000
INR-USD_3 months	7,252,327	36,261,636	36,261,636	35,000,000	7,500,000
INR-USD_6 months	21,756,982	54,392,454	54,392,454	55,000,000	20,000,000
INR-USD_1 year	41,338,265	44,964,429	44,964,429	45,000,000	40,000,000
INR-USD_2 years	18,130,818	16,680,353	18,130,818	20,000,000	20,000,000
JPY-NZD_<1 week	19,915	55,186,690	55,186,690	55,000,000	1,000,000
JPY-NZD_1 week	2,746,172	108,444,146	108,444,146	100,000,000	2,500,000
JPY-NZD_1 month	6,223	55,413,220	55,413,220	55,000,000	1,000,000
JPY-NZD_3 months	8,169,717	144,469,667	144,469,667	150,000,000	8,000,000
JPY-NZD_6 months	2,760,735	27,488,171	27,488,171	25,000,000	3,000,000
JPY-USD_<1 week	72,523	74,067,292	74,067,292	75,000,000	1,000,000
JPY-USD_1 week	5,885,699	26,029,704,595	26,029,704,595	26,025,000,000	6,000,000
JPY-USD_1 month	7,252	33,151,863,379	33,151,863,379	33,150,000,000	1,000,000
JPY-USD_3 months	18,597,687	9,666,189,580	9,666,189,580	9,675,000,000	20,000,000
JPY-USD_6 months	29,248,785	221,203,231	221,203,231	225,000,000	30,000,000
KRW-USD_<1 week	72,523,272	5,654,714,200	5,654,714,200	5,650,000,000	75,000,000
KRW-USD_1 week	54,392,454	6,804,495,975	6,804,495,975	6,800,000,000	55,000,000
KRW-USD_1 month	37,244,561	19,756,789,698	19,756,789,698	19,750,000,000	35,000,000
KRW-USD_3 months	19,581,283	11,914,471,200	11,914,471,200	11,925,000,000	20,000,000
KRW-USD_6 months	563,568,716	21,611,934,990	21,611,934,990	21,600,000,000	575,000,000
MXN-USD_<1 week	1,875,436	9,572,847	9,572,847	9,500,000	2,000,000
MXN-USD_1 week	9,344,007	12,448,707	12,448,707	10,000,000	9,500,000
MXN-USD_1 month	2,551,369	28,766,224	28,766,224	30,000,000	2,500,000
MXN-USD_3 months	6,722,579	22,936,935	22,936,935	25,000,000	6,500,000
MXN-USD_6 months	2,220,010	28,105,886	28,105,886	30,000,000	2,000,000
MYR-USD_<1 week	15,113,291	24,637,726	24,637,726	25,000,000	15,000,000
MYR-USD_1 week	31,910,240	44,239,196	44,239,196	45,000,000	30,000,000
MYR-USD_1 month	20,381,226	29,009,309	29,009,309	30,000,000	20,000,000
MYR-USD_3 months	14,504,654	19,581,283	19,581,283	20,000,000	15,000,000
NOK-USD_<1 week	580,186	364,496,476	364,496,476	375,000,000	1,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
NOK-USD_1 week	14,085,359	485,995,301	485,995,301	475,000,000	15,000,000
NOK-USD_1 month	3,708,407	364,496,476	364,496,476	375,000,000	3,500,000
NOK-USD_3 months	217,569,815	295,242,145	295,242,145	300,000,000	225,000,000
NOK-USD_6 months	2,163,347	60,749,413	60,749,413	60,000,000	2,000,000
NZD-USD_<1 week	24,893	186,700	186,700	200,000	1,000,000
NZD-USD_1 week	62,909	4,299,231	4,299,231	4,500,000	1,000,000
NZD-USD_1 month	6,223	236,062,523	236,062,523	225,000,000	1,000,000
NZD-USD_3 months	647,293	39,202,502	39,202,502	40,000,000	1,000,000
NZD-USD_6 months	54,082	1,069,281	1,069,281	1,000,000	1,000,000
PHP-USD_<1 week	10,599,652	645,761,717	645,761,717	650,000,000	10,000,000
PHP-USD_1 week	11,585,499	16,859,104	16,859,104	15,000,000	10,000,000
PHP-USD_1 month	17,405,585	802,288,694	802,288,694	800,000,000	15,000,000
PHP-USD_3 months	7,977,560	329,811,182	329,811,182	325,000,000	8,000,000
RUB-USD_<1 week	436,607	69,109,048	69,109,048	70,000,000	1,000,000
RUB-USD_1 week	24,657,912	45,161,569	45,161,569	45,000,000	25,000,000
RUB-USD_1 month	3,626,164	36,261,636	36,261,636	35,000,000	3,500,000
RUB-USD_3 months	14,504,654	36,261,636	36,261,636	35,000,000	15,000,000
RUB-USD_6 months	10,009,720	52,117,834	52,117,834	50,000,000	10,000,000
SEK-USD_<1 week	468,600	5,736,629	5,736,629	5,500,000	1,000,000
SEK-USD_1 week	13,254,151	167,120,978	167,120,978	175,000,000	15,000,000
SEK-USD_1 month	7,865,874	280,698,066	280,698,066	275,000,000	8,000,000
SEK-USD_3 months	9,440,814	287,225,032	287,225,032	275,000,000	9,500,000
SEK-USD_6 months	237,514	19,228,501	19,228,501	20,000,000	1,000,000
TRY-USD_<1 week	1,579,455	1,617,914	1,617,914	1,500,000	1,500,000
TRY-USD_1 week	1,028,380	19,408,907	19,408,907	20,000,000	1,000,000
TRY-USD_1 month	1,087,849	25,347,023	25,347,023	25,000,000	1,000,000
TRY-USD_3 months	6,599,618	19,549,302	19,549,302	20,000,000	6,500,000
TRY-USD_6 months	455,820	1,990,425	1,990,425	2,000,000	1,000,000
TWD-USD_<1 week	16,165,685	26,108,378	26,108,378	25,000,000	15,000,000
TWD-USD_1 week	21,337,261	58,018,617	58,018,617	60,000,000	20,000,000
TWD-USD_1 month	21,031,749	39,887,799	39,887,799	40,000,000	20,000,000
TWD-USD_3 months	17,405,585	58,018,617	58,018,617	60,000,000	15,000,000
TWD-USD_6 months	36,261,636	72,444,221	72,444,221	70,000,000	35,000,000
USD-XAU_<1 week	27,748	636,164,606	636,164,606	625,000,000	1,000,000
USD-XAU_1 week	12,024	300,552,374	300,552,374	300,000,000	1,000,000
USD-XAU_1 month	9,249	871,235,378	871,235,378	875,000,000	1,000,000
USD-XAU_3 months	120,894,029	1,220,445,618	1,220,445,618	1,225,000,000	125,000,000
USD-XAU_6 months	119,446,775	1,190,592,248	1,190,592,248	1,200,000,000	125,000,000
USD-XAU_1 year	46,247	4,516,731,234	4,516,731,234	4,525,000,000	1,000,000
USD-ZAR_<1 week	7,779,644	7,788,419	7,788,419	8,000,000	8,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
USD-ZAR_1 week	7,927,736	7,940,791	7,940,791	8,000,000	8,000,000
USD-ZAR_1 month	1,087,849	80,307,164	80,307,164	80,000,000	1,000,000
USD-ZAR_3 months	9,134,914	80,378,878	80,378,878	80,000,000	9,000,000
USD-ZAR_6 months	1,889,993	4,577,865	4,577,865	4,500,000	2,000,000
ALL_OTHERS	121,350	23,995,603,167	23,995,603,167	24,000,000,000	1,000,000

Table 12: Non-deliverable Forwards (NDF) - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule

DELIVERABLE FORWARDS (DF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CAD-USD_1 month	10%	43	6,164,478	35	504,978,900	10.14%	62.84%	6,000,000
CAD-USD_3 months	10%	43	2,543,606	105	1,168,164,864	9.99%	82.82%	2,500,000
CHF-EUR_<1 week	10%	54	20,513,032	48	2,498,664,908	10.00%	74.50%	20,000,000
CHF-EUR_1 week	10%	42	5,414,195	34	587,741,149	9.94%	77.16%	5,500,000
CHF-EUR_1 month	10%	52	8,546,791	95	3,571,920,919	10.00%	79.10%	8,500,000
CHF-EUR_3 months	10%	57	11,500,000	104	6,684,037,309	9.99%	85.38%	10,000,000
CHF-EUR_6 months	10%	46	16,500,000	33	1,353,306,321	9.91%	69.75%	15,000,000
CHF-USD_<1 week	10%	44	16,410,754	22	1,048,772,642	9.95%	74.56%	15,000,000
CHF-USD_1 week	10%	37	4,343,053	27	327,520,042	10.11%	69.15%	4,500,000
CHF-USD_1 month	10%	47	4,278,873	61	1,260,575,257	9.95%	79.95%	4,500,000
CHF-USD_3 months	10%	54	11,185,667	78	5,468,112,155	10.00%	90.50%	10,000,000
CNH-USD_1 month	10%	11	26,667,913	9	432,610,213	10.47%	44.54%	25,000,000
CNH-USD_3 months	10%	15	41,704,332	10	602,795,080	10.31%	42.28%	40,000,000
DKK-EUR_1 month	10%	43	3,215,974	38	899,992,404	10.05%	82.80%	3,000,000
DKK-EUR_3 months	10%	44	4,604,173	27	846,230,076	9.89%	80.21%	4,500,000
EUR-GBP_<1 week	10%	56	32,449,452	116	7,465,239,578	10.01%	68.52%	30,000,000
EUR-GBP_1 week	10%	50	7,045,263	84	3,687,794,098	10.01%	86.64%	7,000,000
EUR-GBP_1 month	10%	62	9,097,015	221	7,105,061,948	9.98%	76.44%	9,000,000
EUR-GBP_3 months	10%	61	11,406,912	284	50,073,420,381	10.01%	94.28%	10,000,000
EUR-GBP_6 months	10%	62	25,000,000	102	15,560,477,933	9.96%	87.41%	25,000,000
EUR-GBP_1 year	10%	52	8,366,082	61	1,842,291,102	9.93%	78.02%	8,500,000
EUR-JPY_<1 week	10%	45	6,562,943	37	805,510,087	9.97%	74.13%	6,500,000
EUR-JPY_1 week	10%	38	5,019,520	27	810,290,347	9.85%	81.43%	5,000,000
EUR-JPY_1 month	10%	49	5,543,219	100	3,548,509,990	10.04%	81.36%	5,500,000
EUR-JPY_3 months	10%	53	4,682,951	133	8,788,464,778	9.98%	93.16%	4,500,000
EUR-JPY_6 months	10%	47	6,187,622	39	1,542,934,663	9.95%	85.41%	6,000,000
EUR-NOK_1 week	10%	35	4,859,953	45	863,816,281	9.96%	73.71%	5,000,000
EUR-NOK_1 month	10%	44	6,600,000	69	1,204,337,213	9.99%	65.14%	6,500,000
EUR-NOK_3 months	10%	44	1,114,514	132	1,911,275,503	10.02%	92.65%	1,000,000
EUR-PLN_1 month	10%	44	6,786,750	45	624,899,328	9.98%	54.20%	7,000,000
EUR-PLN_3 months	10%	46	2,384,165	63	706,689,583	10.00%	74.12%	2,500,000
EUR-RUB_<1 week	10%	37	12,662,868	13	215,471,709	10.00%	29.29%	15,000,000
EUR-RUB_1 week	10%	31	15,720,792	9	149,630,100	10.11%	28.45%	15,000,000
EUR-RUB_1 month	10%	35	6,919,513	21	1,181,404,265	10.24%	89.04%	7,000,000
EUR-RUB_3 months	10%	45	2,780,240	37	2,178,988,186	10.08%	93.06%	3,000,000
EUR-SEK_<1 week	10%	45	50,000,000	63	5,973,319,317	9.97%	80.20%	50,000,000
EUR-SEK_1 week	10%	43	5,013,629	90	2,409,592,234	10.02%	84.22%	5,000,000
EUR-SEK_1 month	10%	45	5,350,000	164	3,301,957,660	10.00%	77.57%	5,500,000
EUR-SEK_3 months	10%	54	3,793,423	205	7,720,985,189	9.99%	92.03%	4,000,000
EUR-SEK_6 months	10%	48	4,000,000	64	1,648,629,118	10.02%	86.72%	4,000,000
EUR-SEK_1 year	10%	46	2,750,000	56	837,516,931	9.93%	80.46%	3,000,000
EUR-USD_<1 week	10%	66	10,922,005	307	12,303,303,100	10.00%	76.33%	10,000,000
EUR-USD_1 week	10%	57	10,047,569	262	9,183,122,069	9.98%	79.25%	10,000,000
EUR-USD_1 month	10%	71	6,708,403	755	19,353,231,742	10.00%	77.26%	6,500,000
EUR-USD_3 months	10%	66	7,289,629	1,048	65,878,533,796	10.00%	90.77%	7,500,000

LIS calculations on the basis of 10% of trades above LIS rule								
DELIVERABLE FORWARDS (DF)	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
EUR-USD_6 months	10%	69	4,351,396	546	17,213,634,875	10.00%	90.38%	4,500,000
EUR-USD_1 year	10%	65	3,006,491	372	6,480,581,332	9.99%	81.67%	3,000,000
EUR-USD_2 years	10%	60	5,146,680	138	2,665,080,778	9.97%	71.45%	5,000,000
EUR-USD_3 years	10%	35	21,579,492	19	585,857,660	9.84%	66.16%	20,000,000
GBP-USD_<1 week	10%	57	6,879,053	109	3,309,295,975	9.97%	82.43%	7,000,000
GBP-USD_1 week	10%	57	6,067,506	130	3,848,566,542	10.02%	87.00%	6,000,000
GBP-USD_1 month	10%	64	13,120,509	141	8,106,399,731	9.97%	82.07%	15,000,000
GBP-USD_3 months	10%	61	14,583,858	168	17,656,515,776	9.98%	88.78%	15,000,000
GBP-USD_6 months	10%	59	76,144,827	67	14,044,671,435	10.00%	81.35%	75,000,000
GBP-USD_1 year	10%	54	18,671,453	47	1,412,178,259	10.09%	55.22%	20,000,000
INR-USD_1 month	10%	38	123,583	1,229	576,930,753	10.00%	58.07%	100,000
INR-USD_3 months	10%	43	98,798	979	402,749,829	10.00%	54.08%	100,000
JPY-USD_<1 week	10%	50	12,245,420	34	1,026,656,911	10.12%	62.82%	10,000,000
JPY-USD_1 week	10%	38	7,252,327	39	1,167,543,256	10.00%	76.20%	7,500,000
JPY-USD_1 month	10%	54	9,894,019	88	3,368,300,896	9.99%	79.20%	10,000,000
JPY-USD_3 months	10%	59	6,806,451	84	2,835,245,512	9.98%	85.01%	7,000,000
JPY-USD_6 months	10%	37	3,697,236	12	181,318,793	9.84%	67.18%	3,500,000
JPY-USD_1 year	10%	31	72,523,272	11	1,160,372,348	9.65%	61.64%	75,000,000
JPY-USD_2 years	10%	30	87,027,926	11	1,279,512,330	10.19%	46.40%	85,000,000
NOK-SEK_1 month	10%	45	12,149,883	22	442,091,689	9.95%	55.20%	10,000,000
NOK-SEK_3 months	10%	41	6,560,937	15	597,386,116	9.80%	83.60%	6,500,000
NOK-USD_1 month	10%	40	16,520,596	21	1,250,258,843	9.95%	77.99%	15,000,000
NOK-USD_3 months	10%	43	5,577,261	30	639,295,138	9.87%	71.24%	5,500,000
SEK-USD_<1 week	10%	43	7,252,184	27	659,914,610	9.85%	69.30%	7,500,000
SEK-USD_1 week	10%	37	5,448,061	37	794,178,616	9.95%	76.00%	5,500,000
SEK-USD_1 month	10%	46	8,702,793	65	1,559,837,526	10.08%	63.33%	8,500,000
SEK-USD_3 months	10%	51	6,672,141	101	3,526,462,886	10.01%	80.42%	6,500,000
SEK-USD_6 months	10%	50	9,337,371	39	1,964,911,146	10.00%	86.15%	9,500,000
SEK-USD_1 year	10%	44	5,890,630	26	943,995,978	10.04%	83.85%	6,000,000
ALL_OTHERS	10%	73	3,883,204	4,594	115,250,824,293	10.00%	83.10%	4,000,000
ALL_OTHERS	30%	73	810,000	13,781	132,523,982,226	30.00%	95.56%	800,000

Table 13: Deliverable Forwards (DF) - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule

DELIVERABLE FORWARDS (DF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CAD-USD_1 month	30%	15,229,887	13	251,164,483	3.77%	31.25%	15,000,000
CAD-USD_3 months	30%	27,845,403	8	447,132,189	0.76%	31.70%	30,000,000
CHF-EUR_<1 week	30%	80,000,000	11	1,029,168,089	2.29%	30.69%	80,000,000
CHF-EUR_1 week	30%	32,813,304	5	251,145,413	1.46%	32.97%	35,000,000
CHF-EUR_1 month	30%	73,829,934	12	1,409,834,667	1.26%	31.22%	75,000,000
CHF-EUR_3 months	30%	144,973,000	6	2,418,829,032	0.58%	30.90%	150,000,000
CHF-EUR_6 months	30%	72,036,687	3	605,334,883	0.90%	31.20%	70,000,000
CHF-USD_<1 week	30%	68,129,168	6	488,727,344	2.71%	34.74%	70,000,000
CHF-USD_1 week	30%	18,207,078	5	151,511,849	1.87%	31.99%	20,000,000
CHF-USD_1 month	30%	324,375,563	2	653,682,708	0.33%	41.46%	325,000,000
CHF-USD_3 months	30%	1,104,788,579	1	2,218,687,476	0.13%	36.72%	1,100,000,000
CNH-USD_1 month	30%	48,508,971	3	322,533,636	3.49%	33.21%	50,000,000
CNH-USD_3 months	30%	55,554,069	6	464,072,806	6.19%	32.55%	55,000,000
DKK-EUR_1 month	30%	66,988,479	3	337,944,086	0.79%	31.09%	65,000,000
DKK-EUR_3 months	30%	355,345,000	-	355,345,000	0.00%	33.68%	350,000,000
EUR-GBP_<1 week	30%	76,000,000	29	3,342,471,846	2.50%	30.68%	75,000,000
EUR-GBP_1 week	30%	120,000,000	7	1,312,005,692	0.83%	30.82%	125,000,000
EUR-GBP_1 month	30%	60,675,063	20	2,839,374,140	0.90%	30.55%	60,000,000
EUR-GBP_3 months	30%	13,607,808,878	2	27,887,164,096	0.07%	52.51%	13,600,000,000
EUR-GBP_6 months	30%	425,000,000	10	5,512,504,608	0.98%	30.97%	425,000,000
EUR-GBP_1 year	30%	66,378,519	6	751,788,252	0.98%	31.84%	65,000,000
EUR-JPY_<1 week	30%	65,229,860	5	332,919,439	1.35%	30.64%	65,000,000
EUR-JPY_1 week	30%	90,000,000	2	351,000,000	0.73%	35.27%	90,000,000
EUR-JPY_1 month	30%	600,000,000	1	1,400,000,000	0.10%	32.10%	600,000,000
EUR-JPY_3 months	30%	2,019,971,000	1	4,052,878,000	0.08%	42.96%	2,025,000,000
EUR-JPY_6 months	30%	367,560,000	1	847,120,000	0.26%	46.89%	375,000,000
EUR-NOK_1 week	30%	100,493,926	2	381,917,538	0.44%	32.59%	100,000,000
EUR-NOK_1 month	30%	20,000,000	11	564,384,658	1.59%	30.53%	20,000,000
EUR-NOK_3 months	30%	73,766,976	5	636,278,124	0.38%	30.84%	75,000,000
EUR-PLN_1 month	30%	14,691,528	17	350,084,821	3.77%	30.36%	15,000,000
EUR-PLN_3 months	30%	20,775,226	5	289,358,423	0.79%	30.35%	20,000,000
EUR-RUB_<1 week	30%	12,645,753	13	228,117,462	10.00%	31.01%	15,000,000
EUR-RUB_1 week	30%	15,298,552	9	164,928,652	10.11%	31.36%	15,000,000
EUR-RUB_1 month	30%	1,019,903,482	1	1,019,903,482	0.49%	76.87%	1,025,000,000
EUR-RUB_3 months	30%	1,591,049,432	-	1,591,049,432	0.00%	67.95%	1,600,000,000
EUR-SEK_<1 week	30%	110,299,846	14	2,343,972,221	2.22%	31.47%	100,000,000
EUR-SEK_1 week	30%	105,843,286	7	875,713,926	0.78%	30.61%	100,000,000
EUR-SEK_1 month	30%	80,415,450	2	1,320,090,188	0.12%	31.01%	80,000,000
EUR-SEK_3 months	30%	601,975,972	1	2,581,552,449	0.05%	30.77%	600,000,000
EUR-SEK_6 months	30%	78,344,395	4	609,154,707	0.63%	32.04%	80,000,000
EUR-SEK_1 year	30%	30,450,875	8	336,068,559	1.42%	32.29%	30,000,000
EUR-USD_<1 week	30%	132,722,000	20	4,877,215,293	0.65%	30.26%	125,000,000
EUR-USD_1 week	30%	72,523,272	21	3,487,108,954	0.80%	30.10%	75,000,000
EUR-USD_1 month	30%	65,873,995	53	7,537,307,750	0.70%	30.09%	65,000,000
EUR-USD_3 months	30%	529,912,321	13	21,811,156,638	0.12%	30.05%	525,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
DELIVERABLE FORWARDS (DF)	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
EUR-USD_6 months	30%	100,000,000	34	5,766,887,719	0.62%	30.28%	100,000,000
EUR-USD_1 year	30%	72,163,089	24	2,437,193,988	0.64%	30.71%	70,000,000
EUR-USD_2 years	30%	24,450,000	21	1,124,440,473	1.52%	30.15%	25,000,000
EUR-USD_3 years	30%	32,635,472	8	269,491,271	4.15%	30.43%	35,000,000
GBP-USD_<1 week	30%	121,350,126	3	1,241,751,014	0.27%	30.93%	125,000,000
GBP-USD_1 week	30%	78,551,287	7	1,377,034,556	0.54%	31.13%	80,000,000
GBP-USD_1 month	30%	182,214,720	14	3,050,488,375	0.99%	30.89%	175,000,000
GBP-USD_3 months	30%	268,457,892	15	6,043,181,911	0.89%	30.39%	275,000,000
GBP-USD_6 months	30%	324,658,482	12	5,394,879,544	1.79%	31.25%	325,000,000
GBP-USD_1 year	30%	27,694,311	18	767,421,357	3.86%	30.01%	30,000,000
INR-USD_1 month	30%	368,418	293	298,285,565	2.39%	30.02%	400,000
INR-USD_3 months	30%	371,319	103	223,785,473	1.05%	30.05%	400,000
JPY-USD_<1 week	30%	35,476,901	10	514,410,832	2.98%	31.48%	35,000,000
JPY-USD_1 week	30%	62,107,633	5	473,476,972	1.28%	30.90%	60,000,000
JPY-USD_1 month	30%	78,516,353	10	1,337,598,905	1.14%	31.45%	80,000,000
JPY-USD_3 months	30%	147,296,360	6	1,033,623,876	0.71%	30.99%	150,000,000
JPY-USD_6 months	30%	23,932,680	2	104,459,088	1.64%	38.70%	25,000,000
JPY-USD_1 year	30%	145,046,544	4	580,186,174	3.51%	30.82%	150,000,000
JPY-USD_2 years	30%	105,561,023	6	923,845,430	5.56%	33.50%	100,000,000
NOK-SEK_1 month	30%	24,664,262	7	259,843,451	3.17%	32.45%	25,000,000
NOK-SEK_3 months	30%	112,052,361	1	225,958,133	0.65%	31.62%	100,000,000
NOK-USD_1 month	30%	145,358,497	3	495,963,163	1.42%	30.94%	150,000,000
NOK-USD_3 months	30%	51,417,355	3	293,104,511	0.99%	32.66%	50,000,000
SEK-USD_<1 week	30%	54,468,766	3	285,978,069	1.09%	30.03%	55,000,000
SEK-USD_1 week	30%	105,609,984	2	326,001,918	0.54%	31.20%	100,000,000
SEK-USD_1 month	30%	35,128,822	13	773,267,683	2.02%	31.40%	35,000,000
SEK-USD_3 months	30%	704,779,292	2	1,419,078,853	0.20%	32.36%	700,000,000
SEK-USD_6 months	30%	135,618,518	5	700,629,198	1.28%	30.72%	125,000,000
SEK-USD_1 year	30%	92,839,830	4	409,480,354	1.54%	36.37%	95,000,000
ALL_OTHERS	30%	1,013,004,743	32	42,115,238,809	0.07%	30.37%	1,025,000,000

Table 14: Deliverable Forwards (DF) - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
DELIVERABLE FORWARDS (DF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
CAD-USD _1 month	6,164,478	15,229,887	15,229,887	15,000,000	6,000,000
CAD-USD _3 months	2,543,606	27,845,403	27,845,403	30,000,000	2,500,000
CHF-EUR <1 w eek	20,513,032	80,000,000	80,000,000	80,000,000	20,000,000
CHF-EUR _1 w eek	5,414,195	32,813,304	32,813,304	35,000,000	5,500,000
CHF-EUR _1 month	8,546,791	73,829,934	73,829,934	75,000,000	8,500,000
CHF-EUR _3 months	11,500,000	144,973,000	144,973,000	150,000,000	10,000,000
CHF-EUR _6 months	16,500,000	72,036,687	72,036,687	70,000,000	15,000,000
CHF-USD <1 w eek	16,410,754	68,129,168	68,129,168	70,000,000	15,000,000
CHF-USD _1 w eek	4,343,053	18,207,078	18,207,078	20,000,000	4,500,000
CHF-USD _1 month	4,278,873	324,375,563	324,375,563	325,000,000	4,500,000
CHF-USD _3 months	11,185,667	1,104,788,579	1,104,788,579	1,100,000,000	10,000,000
CNH-USD _1 month	26,667,913	48,508,971	48,508,971	50,000,000	25,000,000
CNH-USD _3 months	41,704,332	55,554,069	55,554,069	55,000,000	40,000,000
DKK-EUR _1 month	3,215,974	66,988,479	66,988,479	65,000,000	3,000,000
DKK-EUR _3 months	4,604,173	355,345,000	355,345,000	350,000,000	4,500,000
EUR-GBP <1 w eek	32,449,452	76,000,000	76,000,000	75,000,000	30,000,000
EUR-GBP _1 w eek	7,045,263	120,000,000	120,000,000	125,000,000	7,000,000
EUR-GBP _1 month	9,097,015	60,675,063	60,675,063	60,000,000	9,000,000
EUR-GBP _3 months	11,406,912	13,607,808,878	13,607,808,878	13,600,000,000	10,000,000
EUR-GBP _6 months	25,000,000	425,000,000	425,000,000	425,000,000	25,000,000
EUR-GBP _1 year	8,366,082	66,378,519	66,378,519	65,000,000	8,500,000
EUR-JPY <1 w eek	6,562,943	65,229,860	65,229,860	65,000,000	6,500,000
EUR-JPY _1 w eek	5,019,520	90,000,000	90,000,000	90,000,000	5,000,000
EUR-JPY _1 month	5,543,219	600,000,000	600,000,000	600,000,000	5,500,000
EUR-JPY _3 months	4,682,951	2,019,971,000	2,019,971,000	2,025,000,000	4,500,000
EUR-JPY _6 months	6,187,622	367,560,000	367,560,000	375,000,000	6,000,000
EUR-NOK _1 w eek	4,859,953	100,493,926	100,493,926	100,000,000	5,000,000
EUR-NOK _1 month	6,600,000	20,000,000	20,000,000	20,000,000	6,500,000
EUR-NOK _3 months	1,114,514	73,766,976	73,766,976	75,000,000	1,000,000
EUR-PLN _1 month	6,786,750	14,691,528	14,691,528	15,000,000	7,000,000
EUR-PLN _3 months	2,384,165	20,775,226	20,775,226	20,000,000	2,500,000
EUR-RUB <1 w eek	12,662,868	12,645,753	12,662,868	15,000,000	15,000,000
EUR-RUB _1 w eek	15,720,792	15,298,552	15,720,792	15,000,000	15,000,000
EUR-RUB _1 month	6,919,513	1,019,903,482	1,019,903,482	1,025,000,000	7,000,000
EUR-RUB _3 months	2,780,240	1,591,049,432	1,591,049,432	1,600,000,000	3,000,000
EUR-SEK <1 w eek	50,000,000	110,299,846	110,299,846	100,000,000	50,000,000
EUR-SEK _1 w eek	5,013,629	105,843,286	105,843,286	100,000,000	5,000,000
EUR-SEK _1 month	5,350,000	80,415,450	80,415,450	80,000,000	5,500,000
EUR-SEK _3 months	3,793,423	601,975,972	601,975,972	600,000,000	4,000,000
EUR-SEK _6 months	4,000,000	78,344,395	78,344,395	80,000,000	4,000,000

Threshold selection					
DELIVERABLE FORWARDS (DF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
EUR-SEK__1 year	2,750,000	30,450,875	30,450,875	30,000,000	3,000,000
EUR-USD__<1 week	10,922,005	132,722,000	132,722,000	125,000,000	10,000,000
EUR-USD__1 week	10,047,569	72,523,272	72,523,272	75,000,000	10,000,000
EUR-USD__1 month	6,708,403	65,873,995	65,873,995	65,000,000	6,500,000
EUR-USD__3 months	7,289,629	529,912,321	529,912,321	525,000,000	7,500,000
EUR-USD__6 months	4,351,396	100,000,000	100,000,000	100,000,000	4,500,000
EUR-USD__1 year	3,006,491	72,163,089	72,163,089	70,000,000	3,000,000
EUR-USD__2 years	5,146,680	24,450,000	24,450,000	25,000,000	5,000,000
EUR-USD__3 years	21,579,492	32,635,472	32,635,472	35,000,000	20,000,000
GBP-USD__<1 week	6,879,053	121,350,126	121,350,126	125,000,000	7,000,000
GBP-USD__1 week	6,067,506	78,551,287	78,551,287	80,000,000	6,000,000
GBP-USD__1 month	13,120,509	182,214,720	182,214,720	175,000,000	15,000,000
GBP-USD__3 months	14,583,858	268,457,892	268,457,892	275,000,000	15,000,000
GBP-USD__6 months	76,144,827	324,658,482	324,658,482	325,000,000	75,000,000
GBP-USD__1 year	18,671,453	27,694,311	27,694,311	30,000,000	20,000,000
INR-USD__1 month	123,583	368,418	368,418	400,000	1,000,000
INR-USD__3 months	98,798	371,319	371,319	400,000	1,000,000
JPY-USD__<1 week	12,245,420	35,476,901	35,476,901	35,000,000	10,000,000
JPY-USD__1 week	7,252,327	62,107,633	62,107,633	60,000,000	7,500,000
JPY-USD__1 month	9,894,019	78,516,353	78,516,353	80,000,000	10,000,000
JPY-USD__3 months	6,806,451	147,296,360	147,296,360	150,000,000	7,000,000
JPY-USD__6 months	3,697,236	23,932,680	23,932,680	25,000,000	3,500,000
JPY-USD__1 year	72,523,272	145,046,544	145,046,544	150,000,000	75,000,000
JPY-USD__2 years	87,027,926	105,561,023	105,561,023	100,000,000	85,000,000
NOK-SEK__1 month	12,149,883	24,664,262	24,664,262	25,000,000	10,000,000
NOK-SEK__3 months	6,560,937	112,052,361	112,052,361	100,000,000	6,500,000
NOK-USD__1 month	16,520,596	145,358,497	145,358,497	150,000,000	15,000,000
NOK-USD__3 months	5,577,261	51,417,355	51,417,355	50,000,000	5,500,000
SEK-USD__<1 week	7,252,184	54,468,766	54,468,766	55,000,000	7,500,000
SEK-USD__1 week	5,448,061	105,609,984	105,609,984	100,000,000	5,500,000
SEK-USD__1 month	8,702,793	35,128,822	35,128,822	35,000,000	8,500,000
SEK-USD__3 months	6,672,141	704,779,292	704,779,292	700,000,000	6,500,000
SEK-USD__6 months	9,337,371	135,618,518	135,618,518	125,000,000	9,500,000
SEK-USD__1 year	5,890,630	92,839,830	92,839,830	95,000,000	6,000,000
ALL_OTHERS	3,883,204	1,013,004,743	1,013,004,743	1,025,000,000	1,000,000

Table 15: Deliverable Forwards (DF) - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule								
FX OPTIONS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-USD__1 month	10%	73	20,223,114	913	43,076,578,651	10.00%	70.22%	20,000,000
AUD-USD__3 months	10%	75	32,943,696	603	43,388,765,515	10.00%	59.71%	35,000,000
EUR-USD__<1 week	10%	77	59,072,381	230	27,297,486,820	9.99%	41.33%	60,000,000
EUR-USD__1 week	10%	71	70,492,620	370	62,548,980,691	10.01%	51.84%	70,000,000
EUR-USD__1 month	10%	73	50,766,290	1,224	178,001,046,112	10.00%	59.40%	50,000,000
EUR-USD__3 months	10%	77	50,766,290	1,147	151,876,935,205	10.00%	56.06%	50,000,000
EUR-USD__6 months	10%	70	52,398,064	791	116,147,676,649	10.00%	60.75%	50,000,000
EUR-USD__1 year	10%	69	50,000,000	861	82,409,676,247	10.00%	57.18%	50,000,000
EUR-USD__2 years	10%	67	49,896,011	346	27,795,968,332	10.00%	46.99%	50,000,000
GBP-USD__1 month	10%	68	36,405,038	441	37,712,413,001	9.99%	67.76%	35,000,000
GBP-USD__3 months	10%	71	37,422,008	276	25,731,724,695	10.00%	59.15%	35,000,000
USD-CAD__1 month	10%	70	37,213,667	346	41,616,127,715	9.99%	64.32%	35,000,000
USD-CAD__3 months	10%	66	57,136,368	247	42,295,786,819	9.99%	57.63%	55,000,000
USD-CAD__6 months	10%	66	38,832,943	134	12,041,893,751	9.98%	49.14%	40,000,000
USD-CAD__1 year	10%	64	50,041,058	157	21,976,176,422	9.99%	62.83%	50,000,000
USD-CNY__1 month	10%	62	107,527,469	84	15,971,950,745	10.04%	45.21%	100,000,000
USD-CNY__3 months	10%	69	120,475,130	222	43,496,363,897	10.00%	41.80%	125,000,000
USD-CNY__6 months	10%	68	101,200,744	295	61,433,588,827	9.99%	47.28%	100,000,000
USD-CNY__1 year	10%	68	108,784,908	673	127,971,565,246	10.00%	39.26%	100,000,000
USD-CNY__2 years	10%	65	110,767,303	531	186,930,343,156	10.01%	57.27%	100,000,000
USD-CNY__3 years	10%	48	143,681,566	114	38,787,167,238	9.99%	51.84%	150,000,000
USD-JPY__<1 week	10%	79	58,018,617	115	14,197,378,589	10.04%	43.53%	60,000,000
USD-JPY__1 week	10%	73	72,372,878	282	40,166,491,329	9.99%	45.60%	70,000,000
USD-JPY__1 month	10%	79	71,783,962	923	128,770,819,695	10.00%	57.63%	70,000,000
USD-JPY__3 months	10%	73	72,523,272	923	223,744,881,678	10.00%	67.56%	75,000,000
USD-JPY__6 months	10%	71	75,211,030	441	95,399,418,516	10.00%	58.71%	75,000,000
USD-JPY__1 year	10%	68	54,238,417	290	44,962,495,553	10.02%	54.55%	55,000,000
USD-JPY__2 years	10%	65	50,766,290	187	19,614,889,346	10.00%	44.87%	50,000,000
USD-JPY__3 years	10%	54	58,018,617	94	17,533,232,153	10.03%	53.64%	60,000,000
ALL_OTHERS	10%	88	31,891,624	15,330	1,078,419,598,726	10.00%	58.89%	30,000,000
ALL_OTHERS	30%	88	10,245,954	45,990	1,650,589,181,336	30.00%	90.13%	10,000,000

Table 16: FX Options - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
FX OPTIONS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-USD__1 month	30%	64,183,096	178	18,415,180,136	1.95%	30.02%	65,000,000
AUD-USD__3 months	30%	67,765,745	140	21,810,891,727	2.32%	30.02%	70,000,000
EUR-USD__<1 w week	30%	93,750,000	127	19,869,744,562	5.51%	30.08%	95,000,000
EUR-USD__1 w week	30%	148,491,399	84	36,215,045,082	2.27%	30.02%	150,000,000
EUR-USD__1 month	30%	158,282,041	245	89,930,233,187	2.00%	30.01%	150,000,000
EUR-USD__3 months	30%	127,085,249	303	81,346,710,561	2.64%	30.03%	125,000,000
EUR-USD__6 months	30%	179,064,309	179	57,429,375,769	2.26%	30.04%	175,000,000
EUR-USD__1 year	30%	100,000,000	221	47,877,244,687	2.57%	33.22%	100,000,000
EUR-USD__2 years	30%	69,383,014	164	17,769,240,943	4.74%	30.04%	70,000,000
GBP-USD__1 month	30%	119,119,474	80	16,732,530,398	1.81%	30.06%	125,000,000
GBP-USD__3 months	30%	95,730,719	63	13,060,019,037	2.28%	30.02%	95,000,000
USD-CAD__1 month	30%	177,262,901	46	19,416,126,902	1.33%	30.01%	175,000,000
USD-CAD__3 months	30%	234,134,011	37	22,193,594,137	1.50%	30.24%	225,000,000
USD-CAD__6 months	30%	73,213,701	46	7,420,266,073	3.43%	30.28%	75,000,000
USD-CAD__1 year	30%	184,683,209	22	10,632,837,952	1.40%	30.40%	175,000,000
USD-CNY__1 month	30%	146,405,479	44	10,718,840,410	5.26%	30.34%	150,000,000
USD-CNY__3 months	30%	145,938,476	133	31,242,289,573	5.99%	30.03%	150,000,000
USD-CNY__6 months	30%	177,169,310	124	39,141,195,181	4.20%	30.12%	175,000,000
USD-CNY__1 year	30%	145,046,544	461	97,904,487,034	6.85%	30.04%	150,000,000
USD-CNY__2 years	30%	725,232,718	158	114,669,135,991	2.98%	35.13%	725,000,000
USD-CNY__3 years	30%	514,870,942	40	22,874,671,283	3.51%	30.57%	525,000,000
USD-JPY__<1 w week	30%	73,721,000	53	9,825,356,415	4.63%	30.12%	75,000,000
USD-JPY__1 w week	30%	108,784,908	106	26,447,291,569	3.75%	30.02%	100,000,000
USD-JPY__1 month	30%	145,046,544	206	67,122,169,014	2.23%	30.04%	150,000,000
USD-JPY__3 months	30%	564,082,728	55	99,501,988,685	0.60%	30.04%	575,000,000
USD-JPY__6 months	30%	162,413,253	75	48,851,486,989	1.70%	30.06%	150,000,000
USD-JPY__1 year	30%	173,836,815	57	24,752,611,797	1.97%	30.03%	175,000,000
USD-JPY__2 years	30%	76,630,106	85	13,136,376,077	4.55%	30.05%	75,000,000
USD-JPY__3 years	30%	204,346,950	16	9,939,945,962	1.71%	30.41%	200,000,000
ALL_OTHERS	30%	72,523,272	3,720	549,396,484,324	2.43%	30.00%	75,000,000

Table 17: FX Options - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
FX OPTIONS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
AUD-USD__1 month	20,223,114	64,183,096	64,183,096	65,000,000	20,000,000
AUD-USD__3 months	32,943,696	67,765,745	67,765,745	70,000,000	35,000,000
EUR-USD__<1 week	59,072,381	93,750,000	93,750,000	95,000,000	60,000,000
EUR-USD__1 week	70,492,620	148,491,399	148,491,399	150,000,000	70,000,000
EUR-USD__1 month	50,766,290	158,282,041	158,282,041	150,000,000	50,000,000
EUR-USD__3 months	50,766,290	127,085,249	127,085,249	125,000,000	50,000,000
EUR-USD__6 months	52,398,064	179,064,309	179,064,309	175,000,000	50,000,000
EUR-USD__1 year	50,000,000	100,000,000	100,000,000	100,000,000	50,000,000
EUR-USD__2 years	49,896,011	69,383,014	69,383,014	70,000,000	50,000,000
GBP-USD__1 month	36,405,038	119,119,474	119,119,474	125,000,000	35,000,000
GBP-USD__3 months	37,422,008	95,730,719	95,730,719	95,000,000	35,000,000
USD-CAD__1 month	37,213,667	177,262,901	177,262,901	175,000,000	35,000,000
USD-CAD__3 months	57,136,368	234,134,011	234,134,011	225,000,000	55,000,000
USD-CAD__6 months	38,832,943	73,213,701	73,213,701	75,000,000	40,000,000
USD-CAD__1 year	50,041,058	184,683,209	184,683,209	175,000,000	50,000,000
USD-CNY__1 month	107,527,469	146,405,479	146,405,479	150,000,000	100,000,000
USD-CNY__3 months	120,475,130	145,938,476	145,938,476	150,000,000	125,000,000
USD-CNY__6 months	101,200,744	177,169,310	177,169,310	175,000,000	100,000,000
USD-CNY__1 year	108,784,908	145,046,544	145,046,544	150,000,000	100,000,000
USD-CNY__2 years	110,767,303	725,232,718	725,232,718	725,000,000	100,000,000
USD-CNY__3 years	143,681,566	514,870,942	514,870,942	525,000,000	150,000,000
USD-JPY__<1 week	58,018,617	73,721,000	73,721,000	75,000,000	60,000,000
USD-JPY__1 week	72,372,878	108,784,908	108,784,908	100,000,000	70,000,000
USD-JPY__1 month	71,783,962	145,046,544	145,046,544	150,000,000	70,000,000
USD-JPY__3 months	72,523,272	564,082,728	564,082,728	575,000,000	75,000,000
USD-JPY__6 months	75,211,030	162,413,253	162,413,253	150,000,000	75,000,000
USD-JPY__1 year	54,238,417	173,836,815	173,836,815	175,000,000	55,000,000
USD-JPY__2 years	50,766,290	76,630,106	76,630,106	75,000,000	50,000,000
USD-JPY__3 years	58,018,617	204,346,950	204,346,950	200,000,000	60,000,000
ALL_OTHERS	31,891,624	72,523,272	72,523,272	75,000,000	10,000,000

Table 18: FX Options - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule

FX SWAPS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-USD <1 week	10%	69	85,028,265	1,306	332,461,293,093	10.00%	80.33%	85,000,000
AUD-USD 1 week	10%	55	11,415,212	366	27,030,393,141	10.00%	86.63%	10,000,000
AUD-USD 1 month	10%	64	13,390,278	633	34,026,733,669	10.00%	77.19%	15,000,000
AUD-USD 3 months	10%	58	7,378,377	556	26,942,608,293	10.00%	87.43%	7,500,000
AUD-USD 6 months	10%	46	5,078,525	613	17,619,895,017	9.99%	89.68%	5,000,000
EUR-CHF <1 week	10%	67	50,000,000	481	61,047,711,863	10.00%	68.54%	50,000,000
EUR-CHF 1 week	10%	58	15,968,568	144	10,484,386,614	10.01%	80.63%	15,000,000
EUR-CHF 1 month	10%	62	38,898,306	254	21,719,437,880	9.98%	66.20%	40,000,000
EUR-CHF 3 months	10%	64	40,000,000	185	16,322,630,041	10.03%	68.99%	40,000,000
EUR-GBP <1 week	10%	66	36,560,126	927	116,573,729,198	10.00%	75.86%	35,000,000
EUR-GBP 1 week	10%	63	15,933,272	354	30,131,110,706	9.99%	87.53%	15,000,000
EUR-GBP 1 month	10%	64	16,188,569	655	50,031,892,711	10.00%	84.10%	15,000,000
EUR-GBP 3 months	10%	65	19,102,197	616	50,406,843,750	10.00%	84.06%	20,000,000
EUR-GBP 6 months	10%	63	34,060,401	275	30,301,127,008	10.01%	79.88%	35,000,000
EUR-HUF <1 week	10%	61	13,733,437	147	38,490,728,010	9.98%	93.15%	15,000,000
EUR-HUF 1 week	10%	54	15,000,000	51	1,373,085,748	10.00%	56.73%	15,000,000
EUR-HUF 1 month	10%	60	16,245,898	160	44,504,562,574	9.99%	92.35%	15,000,000
EUR-HUF 3 months	10%	59	27,290,150	72	95,665,043,574	10.04%	97.73%	25,000,000
EUR-JPY <1 week	10%	65	49,494,534	452	92,345,891,258	10.00%	79.80%	50,000,000
EUR-JPY 1 week	10%	51	19,945,470	168	19,357,962,923	10.02%	86.95%	20,000,000
EUR-JPY 1 month	10%	64	14,000,000	307	24,386,506,032	10.02%	85.58%	15,000,000
EUR-JPY 3 months	10%	63	15,000,000	224	17,766,865,640	10.00%	85.45%	15,000,000
EUR-SEK <1 week	10%	66	35,302,400	460	43,788,017,370	10.01%	72.47%	35,000,000
EUR-SEK 1 week	10%	54	22,593,501	122	11,723,812,050	9.99%	84.11%	25,000,000
EUR-SEK 1 month	10%	60	13,979,650	371	29,850,483,414	10.01%	85.10%	15,000,000
EUR-SEK 3 months	10%	64	16,919,392	268	23,308,881,212	10.00%	85.51%	15,000,000
EUR-SEK 6 months	10%	58	47,285,005	134	16,586,777,086	10.01%	77.05%	45,000,000
EUR-USD <1 week	10%	70	116,037,235	4,175	1,760,254,820,559	10.00%	80.27%	125,000,000
EUR-USD 1 week	10%	63	18,081,866	1,521	213,624,305,513	10.00%	92.37%	20,000,000
EUR-USD 1 month	10%	68	26,881,170	2,347	362,240,992,460	10.00%	86.55%	25,000,000
EUR-USD 3 months	10%	71	30,344,738	1,989	283,472,167,723	10.00%	86.12%	30,000,000
EUR-USD 6 months	10%	67	22,833,880	1,393	179,648,956,366	10.00%	88.90%	25,000,000
EUR-USD 1 year	10%	65	16,881,725	434	27,217,762,222	10.00%	84.20%	15,000,000
GBP-USD <1 week	10%	69	91,012,594	1,889	1,276,853,399,588	10.00%	91.53%	90,000,000
GBP-USD 1 week	10%	59	17,094,449	607	67,081,021,997	10.01%	88.94%	15,000,000
GBP-USD 1 month	10%	65	20,944,478	881	106,179,263,552	10.00%	86.11%	20,000,000
GBP-USD 3 months	10%	64	18,228,277	706	72,579,582,050	10.00%	87.64%	20,000,000
GBP-USD 6 months	10%	61	12,135,013	706	58,602,680,619	10.00%	88.91%	10,000,000
USD-CAD <1 week	10%	68	26,383,316	1,453	199,378,964,816	10.00%	88.84%	25,000,000
USD-CAD 1 week	10%	51	1,813,082	647	16,418,052,090	10.00%	97.60%	2,000,000
USD-CAD 1 month	10%	62	14,069,515	456	29,077,916,795	10.00%	79.20%	15,000,000
USD-CAD 3 months	10%	59	12,712,340	343	22,930,318,599	10.01%	86.13%	15,000,000
USD-CAD 6 months	10%	42	6,449,892	508	28,697,367,376	10.00%	92.76%	6,500,000
USD-CHF <1 week	10%	68	121,765,063	960	323,061,492,375	10.00%	74.66%	125,000,000
USD-CHF 1 week	10%	56	21,756,982	224	23,219,510,891	10.02%	84.28%	20,000,000
USD-CHF 1 month	10%	62	19,687,983	433	44,284,905,348	9.99%	86.39%	20,000,000
USD-CHF 3 months	10%	61	41,016,630	206	22,626,966,548	10.00%	71.06%	40,000,000
USD-CHF 6 months	10%	54	23,645,488	183	15,107,781,338	9.98%	79.73%	25,000,000
USD-CNY <1 week	10%	67	59,037,558	500	51,311,747,708	10.00%	40.66%	60,000,000
USD-CNY 1 week	10%	43	40,916,302	71	6,632,932,639	9.99%	59.66%	40,000,000

LIS calculations on the basis of 10% of trades above LIS rule								
FX SWAPS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
USD-CNY__1 month	10%	55	47,179,581	123	10,164,621,315	10.01%	44.52%	45,000,000
USD-CNY__3 months	10%	57	36,261,636	134	8,917,150,544	9.99%	39.54%	35,000,000
USD-CNY__6 months	10%	44	36,261,636	141	14,611,997,849	10.02%	55.01%	35,000,000
USD-CNY__1 year	10%	42	36,261,636	168	11,468,252,204	10.02%	48.56%	35,000,000
USD-CNY__2 years	10%	39	36,261,636	139	12,321,531,124	10.02%	48.17%	35,000,000
USD-DKK__<1 w eek	10%	63	134,949,052	313	90,549,727,901	10.00%	62.29%	125,000,000
USD-DKK__1 w eek	10%	55	56,349,399	121	21,640,437,379	10.02%	85.38%	55,000,000
USD-DKK__1 month	10%	56	68,897,108	85	14,531,316,769	9.96%	74.68%	70,000,000
USD-HUF__<1 w eek	10%	64	48,729,803	282	187,509,479,754	10.00%	87.82%	50,000,000
USD-HUF__1 w eek	10%	47	32,486,535	49	30,547,697,241	10.00%	94.14%	30,000,000
USD-HUF__1 month	10%	56	32,631,760	90	96,915,560,678	9.96%	96.95%	35,000,000
USD-HUF__3 months	10%	54	32,439,457	52	113,406,729,720	10.04%	98.84%	30,000,000
USD-JPY__<1 w eek	10%	70	146,540,888	1,849	743,914,807,983	10.00%	74.26%	150,000,000
USD-JPY__1 w eek	10%	58	61,229,771	691	163,640,496,917	10.00%	87.25%	60,000,000
USD-JPY__1 month	10%	66	21,756,982	943	108,994,333,702	10.00%	83.28%	20,000,000
USD-JPY__3 months	10%	66	18,637,049	528	65,860,901,917	10.00%	87.91%	20,000,000
USD-JPY__6 months	10%	50	13,449,110	657	59,852,217,117	10.01%	90.58%	15,000,000
USD-NOK__<1 w eek	10%	64	121,589,498	472	133,774,202,851	10.00%	67.38%	125,000,000
USD-NOK__1 w eek	10%	51	60,863,188	101	20,395,540,382	10.01%	80.87%	60,000,000
USD-NOK__1 month	10%	59	14,504,654	161	22,079,760,817	9.99%	91.43%	15,000,000
USD-NOK__3 months	10%	59	10,878,491	180	26,026,626,938	10.02%	94.90%	10,000,000
USD-NOK__6 months	10%	51	4,458,363	260	20,784,537,101	10.00%	95.48%	4,500,000
USD-SEK__<1 w eek	10%	64	118,307,213	786	211,800,117,334	10.00%	64.02%	125,000,000
USD-SEK__1 w eek	10%	53	36,261,636	183	29,681,408,505	10.03%	86.25%	35,000,000
USD-SEK__1 month	10%	62	28,492,025	267	46,182,061,922	10.02%	89.29%	30,000,000
USD-SEK__3 months	10%	60	26,261,882	222	36,931,947,851	10.01%	91.66%	25,000,000
USD-SEK__6 months	10%	58	14,504,654	312	29,192,443,174	10.00%	91.70%	15,000,000
USD-TRY__<1 w eek	10%	66	50,694,045	550	55,743,285,772	10.01%	62.80%	50,000,000
USD-TRY__1 w eek	10%	56	17,405,585	99	4,347,183,463	10.00%	69.12%	15,000,000
USD-TRY__1 month	10%	60	22,718,679	251	15,510,835,732	10.00%	72.41%	25,000,000
ALL_OTHERS	10%	76	18,732,154	24,308	1,629,077,796,341	10.00%	78.15%	20,000,000
ALL_OTHERS	30%	76	2,627,163	72,923	2,004,214,046,378	30.00%	96.15%	2,500,000

Table 19: FX swaps - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule

FX SWAPS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-USD <1 week	30%	397,691,257	166	124,484,911,096	1.27%	30.08%	400,000,000
AUD-USD 1 week	30%	191,065,392	25	9,411,783,318	0.68%	30.16%	200,000,000
AUD-USD 1 month	30%	167,030,849	51	13,297,893,955	0.81%	30.17%	175,000,000
AUD-USD 3 months	30%	260,706,657	24	9,368,783,437	0.43%	30.40%	250,000,000
AUD-USD 6 months	30%	131,618,425	32	6,010,590,526	0.52%	30.59%	125,000,000
EUR-CHF <1 week	30%	199,426,138	99	26,843,190,252	2.06%	30.14%	200,000,000
EUR-CHF 1 week	30%	192,943,580	13	4,080,292,081	0.90%	31.38%	200,000,000
EUR-CHF 1 month	30%	100,000,000	55	9,942,842,190	2.16%	30.30%	100,000,000
EUR-CHF 3 months	30%	102,541,576	43	7,199,143,111	2.33%	30.43%	100,000,000
EUR-GBP <1 week	30%	231,500,000	120	46,300,309,087	1.29%	30.13%	225,000,000
EUR-GBP 1 week	30%	200,011,072	35	10,348,446,665	0.99%	30.06%	200,000,000
EUR-GBP 1 month	30%	200,017,552	52	17,950,044,909	0.79%	30.17%	200,000,000
EUR-GBP 3 months	30%	180,000,000	52	18,030,483,903	0.84%	30.07%	175,000,000
EUR-GBP 6 months	30%	200,112,444	31	11,423,017,512	1.13%	30.11%	200,000,000
EUR-HUF <1 week	30%	5,500,000,000	1	15,500,000,000	0.07%	37.51%	5,500,000,000
EUR-HUF 1 week	30%	25,000,000	17	746,571,971	3.33%	30.84%	25,000,000
EUR-HUF 1 month	30%	6,000,000,000	1	20,000,000,000	0.06%	41.50%	6,000,000,000
EUR-HUF 3 months	30%	10,000,000,000	2	30,000,000,000	0.28%	30.65%	10,000,000,000
EUR-JPY <1 week	30%	496,789,380	44	35,066,133,428	0.97%	30.30%	500,000,000
EUR-JPY 1 week	30%	365,766,911	11	7,016,013,464	0.66%	31.52%	375,000,000
EUR-JPY 1 month	30%	250,000,000	16	8,722,676,358	0.52%	30.61%	250,000,000
EUR-JPY 3 months	30%	198,670,646	15	6,415,825,096	0.67%	30.86%	200,000,000
EUR-SEK <1 week	30%	135,314,260	79	18,208,309,888	1.72%	30.13%	125,000,000
EUR-SEK 1 week	30%	260,520,325	3	4,251,116,745	0.25%	30.50%	250,000,000
EUR-SEK 1 month	30%	236,965,916	32	10,682,890,309	0.86%	30.46%	225,000,000
EUR-SEK 3 months	30%	230,000,000	17	8,328,807,713	0.63%	30.56%	225,000,000
EUR-SEK 6 months	30%	250,000,000	20	6,582,381,239	1.49%	30.58%	250,000,000
EUR-USD <1 week	30%	889,006,237	398	658,620,637,349	0.95%	30.03%	900,000,000
EUR-USD 1 week	30%	501,208,331	69	69,462,154,708	0.45%	30.03%	500,000,000
EUR-USD 1 month	30%	500,000,000	136	125,931,678,741	0.58%	30.09%	500,000,000
EUR-USD 3 months	30%	366,176,079	142	98,889,979,460	0.71%	30.04%	375,000,000
EUR-USD 6 months	30%	400,000,000	87	60,913,168,573	0.62%	30.14%	400,000,000
EUR-USD 1 year	30%	100,385,988	49	9,711,679,950	1.13%	30.05%	100,000,000
GBP-USD <1 week	30%	582,480,604,179	-	582,480,604,179	0.00%	41.75%	582,475,000,000
GBP-USD 1 week	30%	443,502,335	25	22,777,539,492	0.41%	30.20%	450,000,000
GBP-USD 1 month	30%	465,864,268	42	37,189,485,419	0.48%	30.16%	475,000,000
GBP-USD 3 months	30%	303,375,315	53	25,003,642,555	0.75%	30.19%	300,000,000
GBP-USD 6 months	30%	334,696,612	34	20,046,166,028	0.48%	30.42%	325,000,000
USD-CAD <1 week	30%	329,791,444	130	67,426,467,899	0.89%	30.05%	325,000,000
USD-CAD 1 week	30%	158,299,893	16	5,083,066,813	0.25%	30.22%	150,000,000
USD-CAD 1 month	30%	201,600,916	28	11,153,508,611	0.61%	30.38%	200,000,000
USD-CAD 3 months	30%	196,914,396	20	8,037,106,576	0.58%	30.19%	200,000,000
USD-CAD 6 months	30%	330,648,902	18	9,590,071,479	0.35%	31.00%	325,000,000
USD-CHF <1 week	30%	537,604,973	159	130,011,129,987	1.66%	30.05%	550,000,000
USD-CHF 1 week	30%	234,884,379	19	8,375,662,298	0.85%	30.40%	225,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
FX SWAPS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
USD-CHF__1 month	30%	217,569,815	39	15,560,731,296	0.90%	30.35%	225,000,000
USD-CHF__3 months	30%	179,178,239	26	9,644,992,150	1.26%	30.29%	175,000,000
USD-CHF__6 months	30%	164,066,521	22	5,710,319,752	1.20%	30.13%	175,000,000
USD-CNY__<1 w eek	30%	75,888,007	298	37,906,413,196	5.96%	30.04%	75,000,000
USD-CNY__1 w eek	30%	99,372,219	18	3,408,653,387	2.53%	30.66%	100,000,000
USD-CNY__1 month	30%	71,741,020	65	6,871,577,414	5.29%	30.09%	70,000,000
USD-CNY__3 months	30%	53,644,508	86	6,803,054,210	6.41%	30.16%	55,000,000
USD-CNY__6 months	30%	145,046,544	45	7,977,272,007	3.20%	30.03%	150,000,000
USD-CNY__1 year	30%	72,523,272	63	7,128,856,301	3.76%	30.19%	75,000,000
USD-CNY__2 years	30%	96,455,951	47	7,973,950,913	3.39%	31.17%	95,000,000
USD-DKK__<1 w eek	30%	334,917,819	91	43,837,277,744	2.91%	30.15%	325,000,000
USD-DKK__1 w eek	30%	268,893,023	16	7,852,828,524	1.33%	30.98%	275,000,000
USD-DKK__1 month	30%	270,457,847	14	5,868,833,243	1.64%	30.16%	275,000,000
USD-HUF__<1 w eek	30%	5,801,861,742	9	67,446,642,754	0.32%	31.59%	5,800,000,000
USD-HUF__1 w eek	30%	10,878,490,767	-	10,878,490,767	0.00%	33.52%	10,875,000,000
USD-HUF__1 month	30%	7,252,327,178	3	33,360,705,018	0.33%	33.37%	7,250,000,000
USD-HUF__3 months	30%	7,252,327,178	3	38,437,334,043	0.58%	33.50%	7,250,000,000
USD-JPY__<1 w eek	30%	709,538,022	317	300,773,327,745	1.71%	30.02%	700,000,000
USD-JPY__1 w eek	30%	496,676,615	68	56,266,825,633	0.98%	30.00%	500,000,000
USD-JPY__1 month	30%	290,093,087	83	39,458,209,280	0.88%	30.15%	300,000,000
USD-JPY__3 months	30%	354,769,011	38	22,538,975,351	0.72%	30.08%	350,000,000
USD-JPY__6 months	30%	248,392,206	47	20,034,101,922	0.72%	30.32%	250,000,000
USD-NOK__<1 w eek	30%	362,616,359	110	59,660,544,874	2.33%	30.05%	375,000,000
USD-NOK__1 w eek	30%	365,008,993	13	7,654,445,259	1.29%	30.35%	375,000,000
USD-NOK__1 month	30%	364,532,280	12	7,568,179,614	0.74%	31.34%	375,000,000
USD-NOK__3 months	30%	362,616,359	17	8,259,091,441	0.95%	30.12%	375,000,000
USD-NOK__6 months	30%	362,616,359	10	6,687,177,181	0.38%	30.72%	375,000,000
USD-SEK__<1 w eek	30%	328,476,682	202	99,287,708,144	2.57%	30.01%	325,000,000
USD-SEK__1 w eek	30%	332,966,268	21	10,350,084,865	1.15%	30.08%	325,000,000
USD-SEK__1 month	30%	341,779,756	24	15,586,985,269	0.90%	30.14%	350,000,000
USD-SEK__3 months	30%	301,334,194	20	12,153,300,371	0.90%	30.16%	300,000,000
USD-SEK__6 months	30%	187,835,274	29	9,641,867,783	0.93%	30.29%	200,000,000
USD-TRY__<1 w eek	30%	108,784,908	151	26,708,112,694	2.75%	30.09%	100,000,000
USD-TRY__1 w eek	30%	52,627,333	21	1,927,949,056	2.12%	30.66%	55,000,000
USD-TRY__1 month	30%	72,523,272	54	6,486,293,227	2.15%	30.28%	75,000,000
ALL_OTHERS	30%	132,610,533	2,430	625,464,065,757	1.00%	30.00%	125,000,000

Table 20: FX swaps - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
FX SWAPS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
AUD-USD <1 w eek	85,028,265	397,691,257	397,691,257	400,000,000	85,000,000
AUD-USD 1 w eek	11,415,212	191,065,392	191,065,392	200,000,000	10,000,000
AUD-USD 1 month	13,390,278	167,030,849	167,030,849	175,000,000	15,000,000
AUD-USD 3 months	7,378,377	260,706,657	260,706,657	250,000,000	7,500,000
AUD-USD 6 months	5,078,525	131,618,425	131,618,425	125,000,000	5,000,000
EUR-CHF <1 w eek	50,000,000	199,426,138	199,426,138	200,000,000	50,000,000
EUR-CHF 1 w eek	15,968,568	192,943,580	192,943,580	200,000,000	15,000,000
EUR-CHF 1 month	38,898,306	100,000,000	100,000,000	100,000,000	40,000,000
EUR-CHF 3 months	40,000,000	102,541,576	102,541,576	100,000,000	40,000,000
EUR-GBP <1 w eek	36,560,126	231,500,000	231,500,000	225,000,000	35,000,000
EUR-GBP 1 w eek	15,933,272	200,011,072	200,011,072	200,000,000	15,000,000
EUR-GBP 1 month	16,188,569	200,017,552	200,017,552	200,000,000	15,000,000
EUR-GBP 3 months	19,102,197	180,000,000	180,000,000	175,000,000	20,000,000
EUR-GBP 6 months	34,060,401	200,112,444	200,112,444	200,000,000	35,000,000
EUR-HUF <1 w eek	13,733,437	5,500,000,000	5,500,000,000	5,500,000,000	15,000,000
EUR-HUF 1 w eek	15,000,000	25,000,000	25,000,000	25,000,000	15,000,000
EUR-HUF 1 month	16,245,898	6,000,000,000	6,000,000,000	6,000,000,000	15,000,000
EUR-HUF 3 months	27,290,150	10,000,000,000	10,000,000,000	10,000,000,000	25,000,000
EUR-JPY <1 w eek	49,494,534	496,789,380	496,789,380	500,000,000	50,000,000
EUR-JPY 1 w eek	19,945,470	365,766,911	365,766,911	375,000,000	20,000,000
EUR-JPY 1 month	14,000,000	250,000,000	250,000,000	250,000,000	15,000,000
EUR-JPY 3 months	15,000,000	198,670,646	198,670,646	200,000,000	15,000,000
EUR-SEK <1 w eek	35,302,400	135,314,260	135,314,260	125,000,000	35,000,000
EUR-SEK 1 w eek	22,593,501	260,520,325	260,520,325	250,000,000	25,000,000
EUR-SEK 1 month	13,979,650	236,965,916	236,965,916	225,000,000	15,000,000
EUR-SEK 3 months	16,919,392	230,000,000	230,000,000	225,000,000	15,000,000
EUR-SEK 6 months	47,285,005	250,000,000	250,000,000	250,000,000	45,000,000
EUR-USD <1 w eek	116,037,235	889,006,237	889,006,237	900,000,000	125,000,000
EUR-USD 1 w eek	18,081,866	501,208,331	501,208,331	500,000,000	20,000,000
EUR-USD 1 month	26,881,170	500,000,000	500,000,000	500,000,000	25,000,000
EUR-USD 3 months	30,344,738	366,176,079	366,176,079	375,000,000	30,000,000
EUR-USD 6 months	22,833,880	400,000,000	400,000,000	400,000,000	25,000,000
EUR-USD 1 year	16,881,725	100,385,988	100,385,988	100,000,000	15,000,000
GBP-USD <1 w eek	91,012,594	582,480,604,179	582,480,604,179	582,475,000,000	90,000,000
GBP-USD 1 w eek	17,094,449	443,502,335	443,502,335	450,000,000	15,000,000
GBP-USD 1 month	20,944,478	465,864,268	465,864,268	475,000,000	20,000,000
GBP-USD 3 months	18,228,277	303,375,315	303,375,315	300,000,000	20,000,000
GBP-USD 6 months	12,135,013	334,696,612	334,696,612	325,000,000	10,000,000
USD-CAD <1 w eek	26,383,316	329,791,444	329,791,444	325,000,000	25,000,000
USD-CAD 1 w eek	1,813,082	158,299,893	158,299,893	150,000,000	2,000,000

Threshold selection					
FX SWAPS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
USD-CAD__1 month	14,069,515	201,600,916	201,600,916	200,000,000	15,000,000
USD-CAD__3 months	12,712,340	196,914,396	196,914,396	200,000,000	15,000,000
USD-CAD__6 months	6,449,892	330,648,902	330,648,902	325,000,000	6,500,000
USD-CHF__<1 w eek	121,765,063	537,604,973	537,604,973	550,000,000	125,000,000
USD-CHF__1 w eek	21,756,982	234,884,379	234,884,379	225,000,000	20,000,000
USD-CHF__1 month	19,687,983	217,569,815	217,569,815	225,000,000	20,000,000
USD-CHF__3 months	41,016,630	179,178,239	179,178,239	175,000,000	40,000,000
USD-CHF__6 months	23,645,488	164,066,521	164,066,521	175,000,000	25,000,000
USD-CNY__<1 w eek	59,037,558	75,888,007	75,888,007	75,000,000	60,000,000
USD-CNY__1 w eek	40,916,302	99,372,219	99,372,219	100,000,000	40,000,000
USD-CNY__1 month	47,179,581	71,741,020	71,741,020	70,000,000	45,000,000
USD-CNY__3 months	36,261,636	53,644,508	53,644,508	55,000,000	35,000,000
USD-CNY__6 months	36,261,636	145,046,544	145,046,544	150,000,000	35,000,000
USD-CNY__1 year	36,261,636	72,523,272	72,523,272	75,000,000	35,000,000
USD-CNY__2 years	36,261,636	96,455,951	96,455,951	95,000,000	35,000,000
USD-DKK__<1 w eek	134,949,052	334,917,819	334,917,819	325,000,000	125,000,000
USD-DKK__1 w eek	56,349,399	268,893,023	268,893,023	275,000,000	55,000,000
USD-DKK__1 month	68,897,108	270,457,847	270,457,847	275,000,000	70,000,000
USD-HUF__<1 w eek	48,729,803	5,801,861,742	5,801,861,742	5,800,000,000	50,000,000
USD-HUF__1 w eek	32,486,535	10,878,490,767	10,878,490,767	10,875,000,000	30,000,000
USD-HUF__1 month	32,631,760	7,252,327,178	7,252,327,178	7,250,000,000	35,000,000
USD-HUF__3 months	32,439,457	7,252,327,178	7,252,327,178	7,250,000,000	30,000,000
USD-JPY__<1 w eek	146,540,888	709,538,022	709,538,022	700,000,000	150,000,000
USD-JPY__1 w eek	61,229,771	496,676,615	496,676,615	500,000,000	60,000,000
USD-JPY__1 month	21,756,982	290,093,087	290,093,087	300,000,000	20,000,000
USD-JPY__3 months	18,637,049	354,769,011	354,769,011	350,000,000	20,000,000
USD-JPY__6 months	13,449,110	248,392,206	248,392,206	250,000,000	15,000,000
USD-NOK__<1 w eek	121,589,498	362,616,359	362,616,359	375,000,000	125,000,000
USD-NOK__1 w eek	60,863,188	365,008,993	365,008,993	375,000,000	60,000,000
USD-NOK__1 month	14,504,654	364,532,280	364,532,280	375,000,000	15,000,000
USD-NOK__3 months	10,878,491	362,616,359	362,616,359	375,000,000	10,000,000
USD-NOK__6 months	4,458,363	362,616,359	362,616,359	375,000,000	4,500,000
USD-SEK__<1 w eek	118,307,213	328,476,682	328,476,682	325,000,000	125,000,000
USD-SEK__1 w eek	36,261,636	332,966,268	332,966,268	325,000,000	35,000,000
USD-SEK__1 month	28,492,025	341,779,756	341,779,756	350,000,000	30,000,000
USD-SEK__3 months	26,261,882	301,334,194	301,334,194	300,000,000	25,000,000
USD-SEK__6 months	14,504,654	187,835,274	187,835,274	200,000,000	15,000,000
USD-TRY__<1 w eek	50,694,045	108,784,908	108,784,908	100,000,000	50,000,000
USD-TRY__1 w eek	17,405,585	52,627,333	52,627,333	55,000,000	15,000,000
USD-TRY__1 month	22,718,679	72,523,272	72,523,272	75,000,000	25,000,000

Threshold selection					
FX SWAPS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
ALL_OTHERS	18,732,154	132,610,533	132,610,533	125,000,000	2,500,000

Table 21: FX swaps - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule								
SPREAD BETTING	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-CAD <1 w week	10%	78	20,441	6,423	517,517,793	10.00%	69.42%	20,000
AUD-JPY <1 w week	10%	78	2,777,753	17,563	194,976,589,595	10.00%	73.38%	3,000,000
AUD-NZD <1 w week	10%	79	35,771	12,216	1,941,260,516	10.00%	77.34%	40,000
AUD-USD <1 w week	10%	79	31,030	74,542	9,345,163,438	10.00%	73.54%	30,000
CAD-JPY <1 w week	10%	77	1,834,063	6,310	51,030,873,702	10.00%	73.52%	2,000,000
CHF-JPY <1 w week	10%	77	2,854,536	8,003	85,042,949,844	10.00%	69.22%	3,000,000
EUR-AUD <1 w week	10%	79	59,334	26,947	5,914,283,124	10.00%	72.20%	60,000
EUR-CAD <1 w week	10%	78	55,671	11,539	2,216,376,430	10.00%	68.86%	60,000
EUR-CHF <1 w week	10%	78	121,805	15,287	6,339,815,363	10.00%	77.70%	100,000
EUR-GBP <1 w week	10%	79	25,004	18,886	2,254,264,225	10.00%	75.21%	30,000
EUR-HUF <1 w week	10%	72	30,617,900	685	29,436,208,320	10.00%	44.41%	30,000,000
EUR-JPY <1 w week	10%	79	7,003,700	64,850	1,562,644,893,392	10.00%	72.41%	7,000,000
EUR-NOK <1 w week	10%	77	306,546	592	758,746,670	9.99%	75.60%	300,000
EUR-NZD <1 w week	10%	78	65,446	9,048	1,689,221,039	10.00%	67.01%	70,000
EUR-SEK <1 w week	10%	72	227,111	726	1,242,938,277	10.00%	84.16%	200,000
EUR-TRY <1 w week	10%	77	147,448	855	577,394,160	10.00%	74.62%	100,000
EUR-USD <1 w week	10%	79	69,281	289,252	101,679,596,444	10.00%	77.09%	70,000
GBP-AUD <1 w week	10%	78	89,454	21,036	7,421,108,897	10.00%	72.28%	90,000
GBP-CAD <1 w week	10%	78	67,678	9,899	3,534,176,591	10.00%	75.17%	70,000
GBP-CHF <1 w week	10%	78	54,919	8,669	2,138,708,475	10.00%	74.61%	50,000
GBP-JPY <1 w week	10%	79	6,294,031	70,947	2,068,410,360,693	10.00%	72.87%	6,500,000
GBP-NZD <1 w week	10%	78	103,142	15,103	4,431,239,478	10.00%	67.43%	100,000
GBP-SEK <1 w week	10%	76	269,195	768	689,593,288	10.00%	61.69%	300,000
GBP-USD <1 w week	10%	79	102,509	146,456	89,863,785,394	10.00%	79.67%	100,000
JPY-NZD <1 w week	10%	78	1,639,264	8,408	57,987,287,954	10.00%	70.75%	1,500,000
USD-CAD <1 w week	10%	79	40,576	48,791	10,006,227,612	10.00%	76.54%	40,000
USD-CHF <1 w week	10%	79	31,878	40,382	4,690,445,570	10.00%	73.95%	30,000
USD-CNY <1 w week	10%	77	226,048	1,794	1,986,646,458	10.00%	81.21%	200,000
USD-DKK <1 w week	10%	76	390,732	735	473,954,666	10.00%	65.15%	400,000
USD-HKD <1 w week	10%	76	112,452	1,176	975,520,140	10.00%	85.20%	100,000
USD-JPY <1 w week	10%	79	3,725,303	110,092	2,047,678,353,422	10.00%	75.96%	3,500,000
USD-MXN <1 w week	10%	78	279,830	1,925	2,476,699,679	10.00%	81.90%	300,000
USD-NZD <1 w week	10%	79	21,511	46,164	4,616,103,905	10.00%	76.45%	20,000
USD-RUB <1 w week	10%	73	497,176	353	798,286,412	10.01%	71.44%	500,000
USD-SEK <1 w week	10%	77	138,681	1,836	1,275,404,727	10.00%	78.43%	100,000
USD-TRY <1 w week	10%	77	383,452	2,288	2,911,280,459	10.00%	71.66%	400,000
USD-ZAR <1 w week	10%	77	376,848	1,600	2,772,346,148	10.00%	80.89%	400,000
ALL_OTHERS	10%	79	43,942	15,534	25,894,931,548	10.00%	96.89%	40,000
ALL_OTHERS	30%	79	7,886	46,601	26,471,696,926	30.00%	99.05%	10,000

Table 22: Spread betting - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
SPREAD BETTING	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
AUD-CAD <1 w eek	30%	206,040	443	223,685,807	0.69%	30.01%	200,000
AUD-JPY <1 w eek	30%	32,080,428	982	79,718,587,187	0.56%	30.00%	30,000,000
AUD-NZD <1 w eek	30%	393,239	955	753,180,676	0.78%	30.01%	400,000
AUD-USD <1 w eek	30%	309,299	6,188	3,812,355,610	0.83%	30.00%	300,000
CAD-JPY <1 w eek	30%	24,592,680	402	20,829,677,180	0.64%	30.01%	25,000,000
CHF-JPY <1 w eek	30%	19,158,540	799	36,877,429,343	1.00%	30.01%	20,000,000
EUR-AUD <1 w eek	30%	591,004	2,182	2,457,551,236	0.81%	30.00%	600,000
EUR-CAD <1 w eek	30%	308,284	1,314	965,619,027	1.14%	30.00%	300,000
EUR-CHF <1 w eek	30%	731,202	2,066	2,448,401,545	1.35%	30.01%	700,000
EUR-GBP <1 w eek	30%	329,612	1,051	899,374,831	0.56%	30.01%	300,000
EUR-HUF <1 w eek	30%	31,176,000	375	19,908,497,720	5.47%	30.04%	30,000,000
EUR-JPY <1 w eek	30%	70,370,000	5,260	647,507,203,546	0.81%	30.00%	70,000,000
EUR-NOK <1 w eek	30%	3,006,432	57	301,174,510	0.96%	30.01%	3,000,000
EUR-NZD <1 w eek	30%	194,170	1,390	756,257,571	1.54%	30.00%	200,000
EUR-SEK <1 w eek	30%	4,479,075	66	446,261,433	0.91%	30.21%	4,500,000
EUR-TRY <1 w eek	30%	1,475,095	114	233,276,971	1.33%	30.15%	1,500,000
EUR-USD <1 w eek	30%	1,120,000	18,541	39,569,301,557	0.64%	30.00%	1,000,000
GBP-AUD <1 w eek	30%	746,442	1,844	3,080,028,655	0.88%	30.00%	700,000
GBP-CAD <1 w eek	30%	1,116,834	682	1,410,498,954	0.69%	30.00%	1,000,000
GBP-CHF <1 w eek	30%	714,835	702	860,593,047	0.81%	30.02%	700,000
GBP-JPY <1 w eek	30%	87,472,265	4,726	851,536,967,618	0.67%	30.00%	85,000,000
GBP-NZD <1 w eek	30%	457,896	1,914	1,971,657,407	1.27%	30.00%	500,000
GBP-SEK <1 w eek	30%	1,318,884	122	335,949,366	1.59%	30.05%	1,500,000
GBP-USD <1 w eek	30%	2,023,016	8,405	33,839,801,772	0.57%	30.00%	2,000,000
JPY-NZD <1 w eek	30%	21,878,765	501	24,598,890,682	0.60%	30.01%	20,000,000
USD-CAD <1 w eek	30%	559,807	3,899	3,922,371,934	0.80%	30.00%	600,000
USD-CHF <1 w eek	30%	318,312	3,012	1,903,014,119	0.75%	30.00%	300,000
USD-CNY <1 w eek	30%	2,714,340	178	735,853,029	0.99%	30.08%	2,500,000
USD-DKK <1 w eek	30%	789,417	127	218,515,036	1.73%	30.04%	800,000
USD-HKD <1 w eek	30%	5,622,069	44	348,726,854	0.37%	30.46%	5,500,000
USD-JPY <1 w eek	30%	37,666,049	9,605	808,753,897,952	0.87%	30.00%	40,000,000
USD-MXN <1 w eek	30%	4,733,630	106	911,803,886	0.55%	30.15%	4,500,000
USD-NZD <1 w eek	30%	268,571	3,261	1,811,559,718	0.71%	30.00%	300,000
USD-RUB <1 w eek	30%	13,017,383	21	339,545,546	0.60%	30.39%	15,000,000
USD-SEK <1 w eek	30%	1,590,193	159	488,584,112	0.87%	30.05%	1,500,000
USD-TRY <1 w eek	30%	1,615,782	284	1,220,453,152	1.24%	30.04%	1,500,000
USD-ZAR <1 w eek	30%	3,879,738	151	1,031,185,595	0.94%	30.09%	4,000,000
ALL_OTHERS	30%	24,214,433	180	8,023,944,602	0.12%	30.02%	25,000,000

Table 23: Spread betting - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
SPREAD BETTING	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
AUD-CAD <1 w eek	20,441	206,040	206,040	200,000	1,000,000
AUD-JPY <1 w eek	2,777,753	32,080,428	32,080,428	30,000,000	3,000,000
AUD-NZD <1 w eek	35,771	393,239	393,239	400,000	1,000,000
AUD-USD <1 w eek	31,030	309,299	309,299	300,000	1,000,000
CAD-JPY <1 w eek	1,834,063	24,592,680	24,592,680	25,000,000	2,000,000
CHF-JPY <1 w eek	2,854,536	19,158,540	19,158,540	20,000,000	3,000,000
EUR-AUD <1 w eek	59,334	591,004	591,004	600,000	1,000,000
EUR-CAD <1 w eek	55,671	308,284	308,284	300,000	1,000,000
EUR-CHF <1 w eek	121,805	731,202	731,202	700,000	1,000,000
EUR-GBP <1 w eek	25,004	329,612	329,612	300,000	1,000,000
EUR-HUF <1 w eek	30,617,900	31,176,000	31,176,000	30,000,000	30,000,000
EUR-JPY <1 w eek	7,003,700	70,370,000	70,370,000	70,000,000	7,000,000
EUR-NOK <1 w eek	306,546	3,006,432	3,006,432	3,000,000	1,000,000
EUR-NZD <1 w eek	65,446	194,170	194,170	200,000	1,000,000
EUR-SEK <1 w eek	227,111	4,479,075	4,479,075	4,500,000	1,000,000
EUR-TRY <1 w eek	147,448	1,475,095	1,475,095	1,500,000	1,000,000
EUR-USD <1 w eek	69,281	1,120,000	1,120,000	1,000,000	1,000,000
GBP-AUD <1 w eek	89,454	746,442	746,442	700,000	1,000,000
GBP-CAD <1 w eek	67,678	1,116,834	1,116,834	1,000,000	1,000,000
GBP-CHF <1 w eek	54,919	714,835	714,835	700,000	1,000,000
GBP-JPY <1 w eek	6,294,031	87,472,265	87,472,265	85,000,000	6,500,000
GBP-NZD <1 w eek	103,142	457,896	457,896	500,000	1,000,000
GBP-SEK <1 w eek	269,195	1,318,884	1,318,884	1,500,000	1,000,000
GBP-USD <1 w eek	102,509	2,023,016	2,023,016	2,000,000	1,000,000
JPY-NZD <1 w eek	1,639,264	21,878,765	21,878,765	20,000,000	1,500,000
USD-CAD <1 w eek	40,576	559,807	559,807	600,000	1,000,000
USD-CHF <1 w eek	31,878	318,312	318,312	300,000	1,000,000
USD-CNY <1 w eek	226,048	2,714,340	2,714,340	2,500,000	1,000,000
USD-DKK <1 w eek	390,732	789,417	789,417	800,000	1,000,000
USD-HKD <1 w eek	112,452	5,622,069	5,622,069	5,500,000	1,000,000
USD-JPY <1 w eek	3,725,303	37,666,049	37,666,049	40,000,000	3,500,000
USD-MXN <1 w eek	279,830	4,733,630	4,733,630	4,500,000	1,000,000
USD-NZD <1 w eek	21,511	268,571	268,571	300,000	1,000,000
USD-RUB <1 w eek	497,176	13,017,383	13,017,383	15,000,000	1,000,000
USD-SEK <1 w eek	138,681	1,590,193	1,590,193	1,500,000	1,000,000
USD-TRY <1 w eek	383,452	1,615,782	1,615,782	1,500,000	1,000,000
USD-ZAR <1 w eek	376,848	3,879,738	3,879,738	4,000,000	1,000,000
ALL_OTHERS	43,942	24,214,433	24,214,433	25,000,000	1,000,000

Table 24: Spread betting - Threshold selection

Proposal

25. With regard to the LIS and SSTI thresholds for the classes of NDF and spread betting contracts, ESMA proposes two alternatives. Each alternative provides for the LIS thresholds calculated on the basis of a different LIS threshold floor. The resulting thresholds under each alternative are therefore applicable under the options included in the Consultation Paper of December 2014, more specifically to option 1 and, to option 2 only for year 2017. In other words, the two alternatives provide for different LIS and SSTI thresholds for the sub-classes of NDF and spread betting contracts due to the different LIS threshold floor applied.
26. Two different floors are proposed for NDF and spread betting contracts because of the highly volatile thresholds obtained across the sub-classes for these two asset classes.
27. Here below the two alternatives are explained in more detail:

Alternative A

- i. under this alternative, ESMA calculates the thresholds for **option 1**²⁰ (i.e. pre-set LIS thresholds without annual recalculation) and for **option 2**²¹ (i.e. annual recalculation of LIS thresholds from 2018 onwards) **only for year 2017** by applying a LIS threshold floor of €1,000,000 [refer to Table 47 of Section 11 of Annex III of draft RTS 9];
- ii. the proposed LIS and SSTI thresholds for **option 1** and **for option 2 only for 2017** are provided in Section 6 of Annex III of draft RTS 9.

Alternative B

- i. under this alternative, ESMA calculates the thresholds for **option 1**²² (i.e. pre-set LIS thresholds without annual recalculation) and for **option 2**²³ (i.e. annual recalculation of LIS thresholds from 2018 onwards) **only for year 2017** by applying a LIS threshold floor of €100,000 [refer to Table 47 – Alternative B in Annex 2.1.2];
- ii. the resulting LIS and SSTI thresholds for **option 1** and **for option 2 only for 2017** are provided in Annex 2.1.2.

²⁰ Option 1 in the Consultation Paper of December 2014.

²¹ Option 2 in the Consultation Paper of December 2014.

²² Option 1 in the Consultation Paper of December 2014.

²³ Option 2 in the Consultation Paper of December 2014.

28. For both alternatives, as explained in the December CP the thresholds under option 1 will not change over time and for option 2 from 2018 onwards will be recalculated on an annual basis.
29. For the classes of DF, FX options, FX swaps and FX futures, ESMA proposes for **option 1** and for **option 2** only for **2017** the LIS and SSTI thresholds provided in Section 6 of Annex III of draft RTS 9. The applicable LIS threshold floor is set to €1,000,000 for DF, FX options and FX swaps, and to €100,000 for FX futures [refer to Table 47 Section 11 of Annex III of draft RTS 9].
- Q2. Do you agree with ESMA's proposal for foreign exchange derivatives? Please specify, for each sub-class (non-deliverable forwards (NDF), deliverable forwards (DF), FX options, FX swaps, spread betting and FX futures) if you agree on the following points providing reasons for your answer and, if you disagree providing ESMA with your alternative proposal:**
- (1) deferral period set to 48 hours**
 - (2) size specific to the instrument threshold set as 50% of the large in scale threshold**
 - (3) volume measure used to set the large in scale and size specific to the instrument threshold as specified in Annex II, Table 3 of draft RTS 9**
 - (4) pre-trade and post-trade thresholds set at the same size**
 - (5) large in scale thresholds: (a) state your preference for the system to set the thresholds (i.e. annual recalculation of the thresholds vs. no recalculation of the thresholds) (b) in the case of a preference for a system with no recalculation (i.e. option 1), provide feedback on the thresholds determined. In the case of a preference for a system with recalculation (i.e. option 2), provide feedback on the thresholds determined for 2017 and on the methodology to recalculate the thresholds from 2018 onwards including the level of granularity of the classes on which the recalculations will be performed**
 - (6) for non-deliverable forwards (NDF) and spread betting contracts only: express your preference for either "Alternative A" or "Alternative B". If you disagree with both ESMA's proposal provides your alternative proposal for the LIS threshold floor.**

Annex 2.1.1: Details on the cleansing of TRs data for foreign exchange derivatives

30. The analysis based on TRs data, which focused on the assessment of the liquidity of OTC traded foreign exchange derivatives, required an extensive cleansing and screening phase. In particular, the following steps were undertaken:
- i. selection of records based on the date of execution of the trade; only trades executed in the period 1 March – 31 May 2014 were retained;
 - ii. selection of records based on the venue of execution in order to disentangle only OTC trades, i.e. those flagged as XOFF, XXXX²⁴;
 - iii. in general, only records whose action type was flagged as “N=new” or empty were considered for the analysis;
 - iv. selection of unique trade ID records per TR and across all TRs, in other words only one record per trade ID was included in the final dataset;
 - v. records flagged as contract resulting from a compression exercise or intragroup transactions as defined in Article 3 of Regulation (EU) No 648/2012 or compressions were excluded;
 - vi. identification of foreign exchange derivatives. Although some TRs provide data per asset class, for other TRs the selection was carried out by means of field 2 of Table 2 included in the delegated regulation (EU) No 148/2013, i.e. “Product ID 1” equal to “CU”. Further screening for contract types (i.e. futures, options, swaps, etc.) was possible by means of field 3 of Table 2 (“Product ID 2”). In this regard, records flagged as “OT” (other) or “SB”²⁵ (spread betting), representing 43% of notional amount of the whole foreign exchange derivatives class, were all considered to be spread betting contracts whenever the delivery type field was flagged as “C” (cash). All the other records, less than 0.01% of the sample considered, were excluded from the analysis. Furthermore, field 18 of Table 2 (“Delivery Type”) was used to divide deliverable from non-deliverable forwards. In particular, when the field was equal to either “P” (physical) or “O” (optional for counterparty), the contract was considered to be a deliverable forward; when equal to “C” (cash) the contract was considered to be a non-deliverable forward;

²⁴ Those records with an empty field were considered to be OTC trades.

²⁵ This code is not provided for by the legislation.

- vii. all records for which a classification was not possible because of missing or incoherent information provided in the report were excluded;
 - viii. extreme values of notional amount were excluded from the calculations;
 - ix. all values were converted into Euro on the basis of the simple average of the ECB foreign exchange reference rates over the three-month period considered²⁶.
31. ESMA is fully aware of quality issues related to the data reported to TRs, especially in the first months after the start of TR reporting. ESMA already put into practice in October 2014 a data quality plan to address those issues. They are mainly due to the absence of a commonly-agreed trade identifier, the incorrect or inconsistent reporting of some data fields or the difficulty that some counterparties faced in obtaining the LEI on time for the go-live of the trade repository system on 12 February 2014. Indeed, a wider use of a unique trade identifier and of the LEI would have facilitated reconciliation of the reports per and across TRs and ESMA's analysis. Furthermore, data quality issues are further exacerbated by the heterogeneous interpretation of the requirements provided by the Regulation in terms of product classification during the initial implementation period of the reporting system, which corresponds to the period available for a comprehensive analysis of the non-equity universe. However, ESMA considers that the quality of TRs' data is, all in all, sufficient to provide a general overview of the OTC trading activity of a class of derivatives over a certain period.

²⁶ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

Annex 2.1.2: Alternative B - LIS and SSTI thresholds for the classes of NDF and spread betting

32. Here below the tables resulting from the application of a LIS threshold floor of €100,000 instead of €1m to NDF and spread betting contracts.
33. The first table corresponds to the “Threshold selection” table, provided in the section “Pre-trade and Post-trade transparency requirements for non-equity instruments”, which includes the following information:
- i. for each sub-class the LIS is calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**) - no change with respect to Table 12: Non-deliverable Forwards (NDF) - Threshold selection and Table 24: Spread betting - Threshold selection;
 - ii. for each sub-class the LIS calculated so that at least 70% of the notional amount is below the threshold (**criterion 2**) - no change with respect to Table 12: Non-deliverable Forwards (NDF) - Threshold selection and Table 24: Spread betting - Threshold selection;
 - iii. the selected LIS threshold as the greater between the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2** - no change with respect to Table 12: Non-deliverable Forwards (NDF) - Threshold selection and Table 24: Spread betting - Threshold selection;
 - iv. the rounded value of the selected LIS threshold - no change with respect to Table 12: Non-deliverable Forwards (NDF) - Threshold selection and Table 24: Spread betting - Threshold selection;
 - v. the threshold for the sub-class applicable for **option 1**²⁷ (pre-set LIS thresholds without annual recalculation) and for **option 2**²⁸ (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017** and that should be provided in the table in Annex III of draft RTS 9 only if a floor set at €100,000 instead of €1m would be used. Please, be aware that the table currently included in Annex III of draft RTS 9 applies a LIS threshold floor of €1m. With respect to Table 12: Non-deliverable Forwards (NDF) - Threshold selection and Table 24: Spread betting - Threshold selection, this column changes because of the LIS threshold floor set at €100,000 instead of €1m.

²⁷ Option 1 in the Consultation Paper of December 2014.

²⁸ Option 2 in the Consultation Paper of December 2014.

34. The second table corresponds to the table that should be included in Annex III of draft RTS 9 if a floor set to €100,000 instead of €1m would be used. Please, be aware that the current table included in Annex III of draft RTS 9 applies a LIS threshold floor of €1m.
35. Last but not least, the third table provides for the applicable LIS threshold floors. Please be aware that this table corresponds to Table 47 which should be included in Section 11 of draft RTS 9 only if a floor set to €100,000 instead of €1m would be used for NDF and spread betting contracts.

Non-deliverable Forwards (NDF)

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
AUD-EUR_<1 week	50,000	742,310	742,310	700,000	100,000
AUD-EUR_1 week	29,903	105,860,469	105,860,469	100,000,000	100,000
AUD-EUR_1 month	10,000	20,085,417	20,085,417	20,000,000	100,000
AUD-EUR_3 months	3,439,816	48,333,169	48,333,169	50,000,000	3,500,000
AUD-EUR_6 months	192,576	2,212,950	2,212,950	2,000,000	200,000
AUD-GBP_<1 week	36,405	50,213,543	50,213,543	50,000,000	100,000
AUD-GBP_1 week	46,113	108,400,033	108,400,033	100,000,000	100,000
AUD-GBP_1 month	12,135	47,535,487	47,535,487	50,000,000	100,000
AUD-GBP_3 months	20,068,679	108,332,991	108,332,991	100,000,000	20,000,000
AUD-GBP_6 months	325,592	5,682,341	5,682,341	5,500,000	300,000
AUD-JPY_<1 week	26,781	63,410,331	63,410,331	65,000,000	100,000
AUD-JPY_1 week	3,777,625	85,895,776	85,895,776	85,000,000	4,000,000
AUD-JPY_1 month	6,695	73,646,529	73,646,529	75,000,000	100,000
AUD-JPY_3 months	8,413,519	91,908,396	91,908,396	90,000,000	8,500,000
AUD-JPY_6 months	15,840,197	127,454,022	127,454,022	125,000,000	15,000,000
AUD-USD_<1 week	40,171	535,611	535,611	500,000	100,000
AUD-USD_1 week	43,317	268,843,414	268,843,414	275,000,000	100,000
AUD-USD_1 month	6,695	218,817,002	218,817,002	225,000,000	100,000
AUD-USD_3 months	6,189,359	271,534,790	271,534,790	275,000,000	6,000,000
AUD-USD_6 months	120,862	9,872,813	9,872,813	10,000,000	100,000
BRL-USD_<1 week	39,887,799	42,117,498	42,117,498	40,000,000	40,000,000
BRL-USD_1 week	37,734,174	44,263,777	44,263,777	45,000,000	40,000,000
BRL-USD_1 month	16,680,353	42,063,498	42,063,498	40,000,000	15,000,000
BRL-USD_3 months	13,964,715	67,561,448	67,561,448	70,000,000	15,000,000
BRL-USD_6 months	34,811,170	45,555,234	45,555,234	45,000,000	35,000,000
CAD-EUR_<1 week	45,000	1,522,200	1,522,200	1,500,000	100,000
CAD-EUR_1 week	50,000	20,116,110	20,116,110	20,000,000	100,000
CAD-EUR_1 month	30,000	11,212,909	11,212,909	10,000,000	100,000
CAD-EUR_3 months	2,756,397	41,909,897	41,909,897	40,000,000	3,000,000
CAD-EUR_6 months	152,266	1,171,293	1,171,293	1,000,000	200,000
CAD-GBP_<1 week	36,405	29,211,283	29,211,283	30,000,000	100,000
CAD-GBP_1 week	12,135	77,637,804	77,637,804	80,000,000	100,000
CAD-GBP_1 month	12,135	10,421,410	10,421,410	10,000,000	100,000
CAD-GBP_3 months	29,195,606	77,110,943	77,110,943	75,000,000	30,000,000
CAD-USD_<1 week	36,262	435,140	435,140	400,000	100,000
CAD-USD_1 week	7,252	15,170,406	15,170,406	15,000,000	100,000
CAD-USD_1 month	6,596	22,033,401	22,033,401	20,000,000	100,000
CAD-USD_3 months	902,082	221,325,677	221,325,677	225,000,000	900,000
CAD-USD_6 months	97,875	1,597,934	1,597,934	1,500,000	100,000
CHF-EUR_<1 week	50,000	1,010,000	1,010,000	1,000,000	100,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
CHF-EUR__1 w eek	480,000	34,059,923	34,059,923	35,000,000	500,000
CHF-EUR__1 month	30,000	101,076,529	101,076,529	100,000,000	100,000
CHF-EUR__3 months	8,490,207	98,910,000	98,910,000	100,000,000	8,500,000
CHF-EUR__6 months	244,120	81,541,061	81,541,061	80,000,000	200,000
CHF-GBP__<1 w eek	24,270	27,698,735	27,698,735	30,000,000	100,000
CHF-GBP__1 w eek	217,217	132,203,947	132,203,947	125,000,000	200,000
CHF-GBP__1 month	12,135	123,049,891	123,049,891	125,000,000	100,000
CHF-GBP__3 months	17,541,227	132,110,729	132,110,729	125,000,000	20,000,000
CHF-GBP__6 months	355,968	6,332,668	6,332,668	6,500,000	400,000
CHF-JPY__<1 w eek	24,610	189,290,108	189,290,108	200,000,000	100,000
CHF-JPY__1 w eek	32,813	207,843,233	207,843,233	200,000,000	100,000
CHF-JPY__1 month	8,203	186,230,267	186,230,267	175,000,000	100,000
CHF-JPY__3 months	26,672,450	47,662,145	47,662,145	50,000,000	25,000,000
CHF-JPY__6 months	12,087,432	47,633,023	47,633,023	50,000,000	10,000,000
CHF-USD__<1 w eek	36,262	974,713	974,713	1,000,000	100,000
CHF-USD__1 w eek	36,262	360,333,394	360,333,394	350,000,000	100,000
CHF-USD__1 month	7,252	321,402,507	321,402,507	325,000,000	100,000
CHF-USD__3 months	12,073,308	290,394,994	290,394,994	300,000,000	10,000,000
CHF-USD__6 months	64,625	82,033,261	82,033,261	80,000,000	100,000
CLP-USD__1 month	23,207,447	58,018,617	58,018,617	60,000,000	25,000,000
CLP-USD__3 months	21,756,982	59,831,699	59,831,699	60,000,000	20,000,000
CLP-USD__6 months	173,975,351	2,583,127,012	2,583,127,012	2,575,000,000	175,000,000
CNY-EUR__1 month	14,316,916	35,197,427	35,197,427	35,000,000	15,000,000
CNY-EUR__3 months	13,562,354	106,334,558	106,334,558	100,000,000	15,000,000
CNY-USD__<1 w eek	36,262	35,976,672	35,976,672	35,000,000	100,000
CNY-USD__1 w eek	26,108,378	43,513,963	43,513,963	45,000,000	25,000,000
CNY-USD__1 month	29,009,309	36,261,636	36,261,636	35,000,000	30,000,000
CNY-USD__3 months	21,812,376	36,261,636	36,261,636	35,000,000	20,000,000
CNY-USD__6 months	28,493,029	63,952,954	63,952,954	65,000,000	30,000,000
CNY-USD__1 year	21,756,982	36,261,636	36,261,636	35,000,000	20,000,000
CNY-USD__2 years	17,584,882	21,756,982	21,756,982	20,000,000	20,000,000
COP-USD__<1 w eek	167,383,711	8,512,120,229	8,512,120,229	8,500,000,000	175,000,000
COP-USD__1 w eek	706,158,349	7,667,667,955	7,667,667,955	7,675,000,000	700,000,000
COP-USD__1 month	69,858,476	7,679,687,237	7,679,687,237	7,675,000,000	70,000,000
COP-USD__3 months	70,301,884	895,321,547	895,321,547	900,000,000	70,000,000
CZK-EUR__1 month	12,745,348	114,921,561	114,921,561	125,000,000	15,000,000
CZK-EUR__3 months	12,773,723	65,549,891	65,549,891	65,000,000	15,000,000
CZK-EUR__6 months	1,421,951	593,719,420	593,719,420	600,000,000	1,500,000
DKK-EUR__<1 w eek	7,464,750	47,000,000	47,000,000	45,000,000	7,500,000
DKK-EUR__1 w eek	7,466,130	200,000,000	200,000,000	200,000,000	7,500,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
DKK-EUR__1 month	14,500,000	200,000,000	200,000,000	200,000,000	15,000,000
DKK-EUR__3 months	100,000,000	249,235,985	249,235,985	250,000,000	100,000,000
DKK-EUR__6 months	89,807,902	200,000,000	200,000,000	200,000,000	90,000,000
DKK-GBP__1 week	20,942,686	291,240,302	291,240,302	300,000,000	20,000,000
DKK-GBP__1 month	23,056,524	121,350,126	121,350,126	125,000,000	25,000,000
DKK-GBP__3 months	23,056,524	53,653,000	53,653,000	55,000,000	25,000,000
DKK-USD__<1 week	72,523	267,934,255	267,934,255	275,000,000	100,000
DKK-USD__1 week	68,897,108	267,934,255	267,934,255	275,000,000	70,000,000
DKK-USD__1 month	14,504,654	267,934,255	267,934,255	275,000,000	15,000,000
DKK-USD__3 months	13,054,189	267,934,255	267,934,255	275,000,000	15,000,000
DKK-USD__6 months	3,935,309	200,950,691	200,950,691	200,000,000	4,000,000
DKK-USD__1 year	20,095,069	482,279,757	482,279,757	475,000,000	20,000,000
EUR-GBP__<1 week	20,000	833,816,667	833,816,667	825,000,000	100,000
EUR-GBP__1 week	884,826	271,000,000	271,000,000	275,000,000	900,000
EUR-GBP__1 month	145,620	785,394,524	785,394,524	775,000,000	100,000
EUR-GBP__3 months	18,000,000	269,600,000	269,600,000	275,000,000	20,000,000
EUR-GBP__6 months	405,505	88,537,002	88,537,002	90,000,000	400,000
EUR-GBP__1 year	800,000	140,000,000	140,000,000	150,000,000	800,000
EUR-GBP__2 years	7,000,000	30,508,268	30,508,268	30,000,000	7,000,000
EUR-GBP__3 years	32,764,534	32,764,534	32,764,534	35,000,000	35,000,000
EUR-HUF__<1 week	30,000	3,928,852,992	3,928,852,992	3,925,000,000	100,000
EUR-HUF__1 week	15,354,650	4,147,157,175	4,147,157,175	4,150,000,000	15,000,000
EUR-HUF__1 month	15,359,700	3,052,905,972	3,052,905,972	3,050,000,000	15,000,000
EUR-HUF__3 months	30,649,000	4,150,124,247	4,150,124,247	4,150,000,000	30,000,000
EUR-HUF__6 months	76,970,750	303,765,000	303,765,000	300,000,000	75,000,000
EUR-HUF__1 year	15,285,050	318,300,000	318,300,000	325,000,000	15,000,000
EUR-JPY__<1 week	80,000	129,041,100	129,041,100	125,000,000	100,000
EUR-JPY__1 week	2,836,100	138,849,000	138,849,000	150,000,000	3,000,000
EUR-JPY__1 month	13,000	305,101,349	305,101,349	300,000,000	100,000
EUR-JPY__3 months	11,027,338	313,000,000	313,000,000	325,000,000	10,000,000
EUR-JPY__6 months	20,869,650	212,481,000	212,481,000	200,000,000	20,000,000
EUR-NOK__<1 week	8,142,180	8,264,200	8,264,200	8,500,000	8,000,000
EUR-NOK__1 week	8,127,150	331,497,260	331,497,260	325,000,000	8,000,000
EUR-NOK__1 month	2,000,000	327,105,820	327,105,820	325,000,000	2,000,000
EUR-NOK__3 months	5,018,873	140,000,000	140,000,000	150,000,000	5,000,000
EUR-NOK__6 months	3,632,213	15,000,000	15,000,000	15,000,000	3,500,000
EUR-PLN__<1 week	4,185,260	4,212,130	4,212,130	4,000,000	4,000,000
EUR-PLN__1 week	4,639,407	56,828,554	56,828,554	55,000,000	4,500,000
EUR-PLN__1 month	5,729,975	14,331,575	14,331,575	15,000,000	5,500,000
EUR-PLN__3 months	7,137,634	29,846,930	29,846,930	30,000,000	7,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
EUR-PLN_6 months	2,070,150	14,300,355	14,300,355	15,000,000	2,000,000
EUR-SEK_<1 week	8,957,350	9,026,010	9,026,010	9,000,000	9,000,000
EUR-SEK_1 week	9,060,980	50,000,000	50,000,000	50,000,000	9,000,000
EUR-SEK_1 month	4,942,881	65,004,074	65,004,074	65,000,000	5,000,000
EUR-SEK_3 months	8,986,841	300,672,923	300,672,923	300,000,000	9,000,000
EUR-SEK_6 months	2,596,685	9,034,280	9,034,280	9,000,000	2,500,000
EUR-USD_<1 week	57,000	200,000,000	200,000,000	200,000,000	100,000
EUR-USD_1 week	30,000	372,603,714	372,603,714	375,000,000	100,000
EUR-USD_1 month	12,000	645,294,665	645,294,665	650,000,000	100,000
EUR-USD_3 months	2,001,509	384,235,000	384,235,000	375,000,000	2,000,000
EUR-USD_6 months	345,390	25,614,754	25,614,754	25,000,000	300,000
EUR-USD_1 year	100,000	58,648,447	58,648,447	60,000,000	100,000
EUR-USD_2 years	4,000,000	22,000,000	22,000,000	20,000,000	4,000,000
EUR-USD_3 years	19,039,400	48,000,000	48,000,000	50,000,000	20,000,000
GBP-HKD_1 week	41,323,812	46,507,136	46,507,136	45,000,000	40,000,000
GBP-HKD_1 month	8,399,868	20,830,402	20,830,402	20,000,000	8,500,000
GBP-HKD_3 months	45,724,696	46,742,819	46,742,819	45,000,000	45,000,000
GBP-HUF_<1 week	24,270	933,374,201	933,374,201	925,000,000	100,000
GBP-HUF_1 week	3,883,642	1,774,064,675	1,774,064,675	1,775,000,000	4,000,000
GBP-HUF_1 month	6,067,506	1,174,694,338	1,174,694,338	1,175,000,000	6,000,000
GBP-HUF_3 months	2,427,003	934,810,161	934,810,161	925,000,000	2,500,000
GBP-HUF_6 months	45,672,547	452,972,109	452,972,109	450,000,000	45,000,000
GBP-JPY_<1 week	99,507	90,863,637	90,863,637	90,000,000	100,000
GBP-JPY_1 week	30,338	221,545,820	221,545,820	225,000,000	100,000
GBP-JPY_1 month	14,562	107,424,057	107,424,057	100,000,000	100,000
GBP-JPY_3 months	33,205,622	272,920,366	272,920,366	275,000,000	35,000,000
GBP-JPY_6 months	22,457,302	626,403,282	626,403,282	625,000,000	20,000,000
GBP-NOK_3 months	24,299,765	46,949,070	46,949,070	45,000,000	25,000,000
GBP-NOK_6 months	3,058,418	6,461,308	6,461,308	6,500,000	3,000,000
GBP-SEK_1 week	5,031,907	56,882,184	56,882,184	55,000,000	5,000,000
GBP-SEK_1 month	5,431,747	37,256,837	37,256,837	35,000,000	5,500,000
GBP-SEK_3 months	45,546,069	56,855,410	56,855,410	55,000,000	45,000,000
GBP-USD_<1 week	60,675	120,678,724	120,678,724	125,000,000	100,000
GBP-USD_1 week	121,350	485,400,503	485,400,503	475,000,000	100,000
GBP-USD_1 month	12,135	161,001,663	161,001,663	150,000,000	100,000
GBP-USD_3 months	12,505,876	648,536,661	648,536,661	650,000,000	15,000,000
GBP-USD_6 months	406,125	120,051,362	120,051,362	125,000,000	400,000
GBP-USD_1 year	60,675	208,002,787	208,002,787	200,000,000	100,000
HUF-USD_<1 week	21,757	1,650,107,498	1,650,107,498	1,650,000,000	100,000
HUF-USD_1 week	226,614,918	895,103,970	895,103,970	900,000,000	225,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
HUF-USD_1 month	32,166,972	1,289,035,308	1,289,035,308	1,300,000,000	30,000,000
HUF-USD_3 months	40,593,088	1,393,936,141	1,393,936,141	1,400,000,000	40,000,000
HUF-USD_6 months	40,221,407	159,105,180	159,105,180	150,000,000	40,000,000
IDR-USD_<1 week	19,896,765	41,519,573,093	41,519,573,093	41,525,000,000	20,000,000
IDR-USD_1 week	14,686,492	41,566,713,220	41,566,713,220	41,575,000,000	15,000,000
IDR-USD_1 month	359,613,200	25,383,145,123	25,383,145,123	25,375,000,000	350,000,000
IDR-USD_3 months	10,878,491	48,841,159,996	48,841,159,996	48,850,000,000	10,000,000
IDR-USD_6 months	11,724,334	22,482,214,251	22,482,214,251	22,475,000,000	10,000,000
INR-USD_<1 week	14,115,137	442,464,481	442,464,481	450,000,000	15,000,000
INR-USD_1 week	27,452,234	399,448,753	399,448,753	400,000,000	25,000,000
INR-USD_1 month	14,504,654	355,731,406	355,731,406	350,000,000	15,000,000
INR-USD_3 months	7,252,327	36,261,636	36,261,636	35,000,000	7,500,000
INR-USD_6 months	21,756,982	54,392,454	54,392,454	55,000,000	20,000,000
INR-USD_1 year	41,338,265	44,964,429	44,964,429	45,000,000	40,000,000
INR-USD_2 years	18,130,818	16,680,353	18,130,818	20,000,000	20,000,000
JPY-NZD_<1 week	19,915	55,186,690	55,186,690	55,000,000	100,000
JPY-NZD_1 week	2,746,172	108,444,146	108,444,146	100,000,000	2,500,000
JPY-NZD_1 month	6,223	55,413,220	55,413,220	55,000,000	100,000
JPY-NZD_3 months	8,169,717	144,469,667	144,469,667	150,000,000	8,000,000
JPY-NZD_6 months	2,760,735	27,488,171	27,488,171	25,000,000	3,000,000
JPY-USD_<1 week	72,523	74,067,292	74,067,292	75,000,000	100,000
JPY-USD_1 week	5,885,699	26,029,704,595	26,029,704,595	26,025,000,000	6,000,000
JPY-USD_1 month	7,252	33,151,863,379	33,151,863,379	33,150,000,000	100,000
JPY-USD_3 months	18,597,687	9,666,189,580	9,666,189,580	9,675,000,000	20,000,000
JPY-USD_6 months	29,248,785	221,203,231	221,203,231	225,000,000	30,000,000
KRW-USD_<1 week	72,523,272	5,654,714,200	5,654,714,200	5,650,000,000	75,000,000
KRW-USD_1 week	54,392,454	6,804,495,975	6,804,495,975	6,800,000,000	55,000,000
KRW-USD_1 month	37,244,561	19,756,789,698	19,756,789,698	19,750,000,000	35,000,000
KRW-USD_3 months	19,581,283	11,914,471,200	11,914,471,200	11,925,000,000	20,000,000
KRW-USD_6 months	563,568,716	21,611,934,990	21,611,934,990	21,600,000,000	575,000,000
MXN-USD_<1 week	1,875,436	9,572,847	9,572,847	9,500,000	2,000,000
MXN-USD_1 week	9,344,007	12,448,707	12,448,707	10,000,000	9,500,000
MXN-USD_1 month	2,551,369	28,766,224	28,766,224	30,000,000	2,500,000
MXN-USD_3 months	6,722,579	22,936,935	22,936,935	25,000,000	6,500,000
MXN-USD_6 months	2,220,010	28,105,886	28,105,886	30,000,000	2,000,000
MYR-USD_<1 week	15,113,291	24,637,726	24,637,726	25,000,000	15,000,000
MYR-USD_1 week	31,910,240	44,239,196	44,239,196	45,000,000	30,000,000
MYR-USD_1 month	20,381,226	29,009,309	29,009,309	30,000,000	20,000,000
MYR-USD_3 months	14,504,654	19,581,283	19,581,283	20,000,000	15,000,000
NOK-USD_<1 week	580,186	364,496,476	364,496,476	375,000,000	600,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
NOK-USD 1 week	14,085,359	485,995,301	485,995,301	475,000,000	15,000,000
NOK-USD 1 month	3,708,407	364,496,476	364,496,476	375,000,000	3,500,000
NOK-USD 3 months	217,569,815	295,242,145	295,242,145	300,000,000	225,000,000
NOK-USD 6 months	2,163,347	60,749,413	60,749,413	60,000,000	2,000,000
NZD-USD <1 week	24,893	186,700	186,700	200,000	100,000
NZD-USD 1 week	62,909	4,299,231	4,299,231	4,500,000	100,000
NZD-USD 1 month	6,223	236,062,523	236,062,523	225,000,000	100,000
NZD-USD 3 months	647,293	39,202,502	39,202,502	40,000,000	600,000
NZD-USD 6 months	54,082	1,069,281	1,069,281	1,000,000	100,000
PHP-USD <1 week	10,599,652	645,761,717	645,761,717	650,000,000	10,000,000
PHP-USD 1 week	11,585,499	16,859,104	16,859,104	15,000,000	10,000,000
PHP-USD 1 month	17,405,585	802,288,694	802,288,694	800,000,000	15,000,000
PHP-USD 3 months	7,977,560	329,811,182	329,811,182	325,000,000	8,000,000
RUB-USD <1 week	436,607	69,109,048	69,109,048	70,000,000	400,000
RUB-USD 1 week	24,657,912	45,161,569	45,161,569	45,000,000	25,000,000
RUB-USD 1 month	3,626,164	36,261,636	36,261,636	35,000,000	3,500,000
RUB-USD 3 months	14,504,654	36,261,636	36,261,636	35,000,000	15,000,000
RUB-USD 6 months	10,009,720	52,117,834	52,117,834	50,000,000	10,000,000
SEK-USD <1 week	468,600	5,736,629	5,736,629	5,500,000	500,000
SEK-USD 1 week	13,254,151	167,120,978	167,120,978	175,000,000	15,000,000
SEK-USD 1 month	7,865,874	280,698,066	280,698,066	275,000,000	8,000,000
SEK-USD 3 months	9,440,814	287,225,032	287,225,032	275,000,000	9,500,000
SEK-USD 6 months	237,514	19,228,501	19,228,501	20,000,000	200,000
TRY-USD <1 week	1,579,455	1,617,914	1,617,914	1,500,000	1,500,000
TRY-USD 1 week	1,028,380	19,408,907	19,408,907	20,000,000	1,000,000
TRY-USD 1 month	1,087,849	25,347,023	25,347,023	25,000,000	1,000,000
TRY-USD 3 months	6,599,618	19,549,302	19,549,302	20,000,000	6,500,000
TRY-USD 6 months	455,820	1,990,425	1,990,425	2,000,000	500,000
TWD-USD <1 week	16,165,685	26,108,378	26,108,378	25,000,000	15,000,000
TWD-USD 1 week	21,337,261	58,018,617	58,018,617	60,000,000	20,000,000
TWD-USD 1 month	21,031,749	39,887,799	39,887,799	40,000,000	20,000,000
TWD-USD 3 months	17,405,585	58,018,617	58,018,617	60,000,000	15,000,000
TWD-USD 6 months	36,261,636	72,444,221	72,444,221	70,000,000	35,000,000
USD-XAU <1 week	27,748	636,164,606	636,164,606	625,000,000	100,000
USD-XAU 1 week	12,024	300,552,374	300,552,374	300,000,000	100,000
USD-XAU 1 month	9,249	871,235,378	871,235,378	875,000,000	100,000
USD-XAU 3 months	120,894,029	1,220,445,618	1,220,445,618	1,225,000,000	125,000,000
USD-XAU 6 months	119,446,775	1,190,592,248	1,190,592,248	1,200,000,000	125,000,000
USD-XAU 1 year	46,247	4,516,731,234	4,516,731,234	4,525,000,000	100,000
USD-ZAR <1 week	7,779,644	7,788,419	7,788,419	8,000,000	8,000,000

Threshold selection					
NON-DELIVERABLE FORWARDS (NDF)	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
USD-ZAR_1 week	7,927,736	7,940,791	7,940,791	8,000,000	8,000,000
USD-ZAR_1 month	1,087,849	80,307,164	80,307,164	80,000,000	1,000,000
USD-ZAR_3 months	9,134,914	80,378,878	80,378,878	80,000,000	9,000,000
USD-ZAR_6 months	1,889,993	4,577,865	4,577,865	4,500,000	2,000,000
ALL_OTHERS	121,350	23,995,603,167	23,995,603,167	24,000,000,000	100,000

Table 25: Non-deliverable Forwards (NDF) - Threshold selection

Table 48 – Alternative B
Non-deliverable forwards (NDF) – liquid classes

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
AUD-EUR	from 1 day	to 4 days	100,000	50,000
AUD-EUR	from 4 days	to 7 days	100,000	50,000
AUD-EUR	from 7 days	to 1 month	100,000	50,000
AUD-EUR	from 1 month	to 3 months	3,500,000	1,750,000
AUD-EUR	from 3 months	to 6 months	200,000	100,000
AUD-GBP	from 1 day	to 4 days	100,000	50,000
AUD-GBP	from 4 days	to 7 days	100,000	50,000
AUD-GBP	from 7 days	to 1 month	100,000	50,000
AUD-GBP	from 1 month	to 3 months	20,000,000	10,000,000
AUD-GBP	from 3 months	to 6 months	300,000	150,000
AUD-JPY	from 1 day	to 4 days	100,000	50,000
AUD-JPY	from 4 days	to 7 days	4,000,000	2,000,000
AUD-JPY	from 7 days	to 1 month	100,000	50,000
AUD-JPY	from 1 month	to 3 months	8,500,000	4,250,000
AUD-JPY	from 3 months	to 6 months	15,000,000	7,500,000
AUD-USD	from 1 day	to 4 days	100,000	50,000
AUD-USD	from 4 days	to 7 days	100,000	50,000
AUD-USD	from 7 days	to 1 month	100,000	50,000
AUD-USD	from 1 month	to 3 months	6,000,000	3,000,000
AUD-USD	from 3 months	to 6 months	100,000	50,000
BRL-USD	from 1 day	to 4 days	40,000,000	20,000,000
BRL-USD	from 4 days	to 7 days	40,000,000	20,000,000
BRL-USD	from 7 days	to 1 month	15,000,000	7,500,000
BRL-USD	from 1 month	to 3 months	15,000,000	7,500,000
BRL-USD	from 3 months	to 6 months	35,000,000	17,500,000
CAD-EUR	from 1 day	to 4 days	100,000	50,000
CAD-EUR	from 4 days	to 7 days	100,000	50,000
CAD-EUR	from 7 days	to 1 month	100,000	50,000
CAD-EUR	from 1 month	to 3 months	3,000,000	1,500,000
CAD-EUR	from 3 months	to 6 months	200,000	100,000
CAD-GBP	from 1 day	to 4 days	100,000	50,000
CAD-GBP	from 4 days	to 7 days	100,000	50,000
CAD-GBP	from 7 days	to 1 month	100,000	50,000
CAD-GBP	from 1 month	to 3 months	30,000,000	15,000,000
CAD-USD	from 1 day	to 4 days	100,000	50,000
CAD-USD	from 4 days	to 7 days	100,000	50,000
CAD-USD	from 7 days	to 1 month	100,000	50,000
CAD-USD	from 1 month	to 3 months	900,000	450,000
CAD-USD	from 3 months	to 6 months	100,000	50,000
CHF-EUR	from 1 day	to 4 days	100,000	50,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
CHF-EUR	from 4 days	to 7 days	500,000	250,000
CHF-EUR	from 7 days	to 1 month	100,000	50,000
CHF-EUR	from 1 month	to 3 months	8,500,000	4,250,000
CHF-EUR	from 3 months	to 6 months	200,000	100,000
CHF-GBP	from 1 day	to 4 days	100,000	50,000
CHF-GBP	from 4 days	to 7 days	200,000	100,000
CHF-GBP	from 7 days	to 1 month	100,000	50,000
CHF-GBP	from 1 month	to 3 months	20,000,000	10,000,000
CHF-GBP	from 3 months	to 6 months	400,000	200,000
CHF-JPY	from 1 day	to 4 days	100,000	50,000
CHF-JPY	from 4 days	to 7 days	100,000	50,000
CHF-JPY	from 7 days	to 1 month	100,000	50,000
CHF-JPY	from 1 month	to 3 months	25,000,000	12,500,000
CHF-JPY	from 3 months	to 6 months	10,000,000	5,000,000
CHF-USD	from 1 day	to 4 days	100,000	50,000
CHF-USD	from 4 days	to 7 days	100,000	50,000
CHF-USD	from 7 days	to 1 month	100,000	50,000
CHF-USD	from 1 month	to 3 months	10,000,000	5,000,000
CHF-USD	from 3 months	to 6 months	100,000	50,000
CLP-USD	from 7 days	to 1 month	25,000,000	12,500,000
CLP-USD	from 1 month	to 3 months	20,000,000	10,000,000
CLP-USD	from 3 months	to 6 months	175,000,000	87,500,000
CNY-EUR	from 7 days	to 1 month	15,000,000	7,500,000
CNY-EUR	from 1 month	to 3 months	15,000,000	7,500,000
CNY-USD	from 1 day	to 4 days	100,000	50,000
CNY-USD	from 4 days	to 7 days	25,000,000	12,500,000
CNY-USD	from 7 days	to 1 month	30,000,000	15,000,000
CNY-USD	from 1 month	to 3 months	20,000,000	10,000,000
CNY-USD	from 3 months	to 6 months	30,000,000	15,000,000
CNY-USD	from 6 months	to 1 year	20,000,000	10,000,000
CNY-USD	from 1 year	to 2 years	20,000,000	10,000,000
COP-USD	from 1 day	to 4 days	175,000,000	87,500,000
COP-USD	from 4 days	to 7 days	700,000,000	350,000,000
COP-USD	from 7 days	to 1 month	70,000,000	35,000,000
COP-USD	from 1 month	to 3 months	70,000,000	35,000,000
CZK-EUR	from 7 days	to 1 month	15,000,000	7,500,000
CZK-EUR	from 1 month	to 3 months	15,000,000	7,500,000
CZK-EUR	from 3 months	to 6 months	1,500,000	750,000
DKK-EUR	from 1 day	to 4 days	7,500,000	3,750,000
DKK-EUR	from 4 days	to 7 days	7,500,000	3,750,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
DKK-EUR	from 7 days	to 1 month	15,000,000	7,500,000
DKK-EUR	from 1 month	to 3 months	100,000,000	50,000,000
DKK-EUR	from 3 months	to 6 months	90,000,000	45,000,000
DKK-GBP	from 4 days	to 7 days	20,000,000	10,000,000
DKK-GBP	from 7 days	to 1 month	25,000,000	12,500,000
DKK-GBP	from 1 month	to 3 months	25,000,000	12,500,000
DKK-USD	from 1 day	to 4 days	100,000	50,000
DKK-USD	from 4 days	to 7 days	70,000,000	35,000,000
DKK-USD	from 7 days	to 1 month	15,000,000	7,500,000
DKK-USD	from 1 month	to 3 months	15,000,000	7,500,000
DKK-USD	from 3 months	to 6 months	4,000,000	2,000,000
DKK-USD	from 6 months	to 1 year	20,000,000	10,000,000
EUR-GBP	from 1 day	to 4 days	100,000	50,000
EUR-GBP	from 4 days	to 7 days	900,000	450,000
EUR-GBP	from 7 days	to 1 month	100,000	50,000
EUR-GBP	from 1 month	to 3 months	20,000,000	10,000,000
EUR-GBP	from 3 months	to 6 months	400,000	200,000
EUR-GBP	from 6 months	to 1 year	800,000	400,000
EUR-GBP	from 1 year	to 2 years	7,000,000	3,500,000
EUR-GBP	from 2 years	to 3 years	35,000,000	17,500,000
EUR-HUF	from 1 day	to 4 days	100,000	50,000
EUR-HUF	from 4 days	to 7 days	15,000,000	7,500,000
EUR-HUF	from 7 days	to 1 month	15,000,000	7,500,000
EUR-HUF	from 1 month	to 3 months	30,000,000	15,000,000
EUR-HUF	from 3 months	to 6 months	75,000,000	37,500,000
EUR-HUF	from 6 months	to 1 year	15,000,000	7,500,000
EUR-JPY	from 1 day	to 4 days	100,000	50,000
EUR-JPY	from 4 days	to 7 days	3,000,000	1,500,000
EUR-JPY	from 7 days	to 1 month	100,000	50,000
EUR-JPY	from 1 month	to 3 months	10,000,000	5,000,000
EUR-JPY	from 3 months	to 6 months	20,000,000	10,000,000
EUR-NOK	from 1 day	to 4 days	8,000,000	4,000,000
EUR-NOK	from 4 days	to 7 days	8,000,000	4,000,000
EUR-NOK	from 7 days	to 1 month	2,000,000	1,000,000
EUR-NOK	from 1 month	to 3 months	5,000,000	2,500,000
EUR-NOK	from 3 months	to 6 months	3,500,000	1,750,000
EUR-PLN	from 1 day	to 4 days	4,000,000	2,000,000
EUR-PLN	from 4 days	to 7 days	4,500,000	2,250,000
EUR-PLN	from 7 days	to 1 month	5,500,000	2,750,000
EUR-PLN	from 1 month	to 3 months	7,000,000	3,500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES			
CURRENCY PAIR	TENOR	LIS (€)	SSTI (€)
EUR-PLN	from 3 months to 6 months	2,000,000	1,000,000
EUR-SEK	from 1 day to 4 days	9,000,000	4,500,000
EUR-SEK	from 4 days to 7 days	9,000,000	4,500,000
EUR-SEK	from 7 days to 1 month	5,000,000	2,500,000
EUR-SEK	from 1 month to 3 months	9,000,000	4,500,000
EUR-SEK	from 3 months to 6 months	2,500,000	1,250,000
EUR-USD	from 1 day to 4 days	100,000	50,000
EUR-USD	from 4 days to 7 days	100,000	50,000
EUR-USD	from 7 days to 1 month	100,000	50,000
EUR-USD	from 1 month to 3 months	2,000,000	1,000,000
EUR-USD	from 3 months to 6 months	300,000	150,000
EUR-USD	from 6 months to 1 year	100,000	50,000
EUR-USD	from 1 year to 2 years	4,000,000	2,000,000
EUR-USD	from 2 years to 3 years	20,000,000	10,000,000
GBP-HKD	from 4 days to 7 days	40,000,000	20,000,000
GBP-HKD	from 7 days to 1 month	8,500,000	4,250,000
GBP-HKD	from 1 month to 3 months	45,000,000	22,500,000
GBP-HUF	from 1 day to 4 days	100,000	50,000
GBP-HUF	from 4 days to 7 days	4,000,000	2,000,000
GBP-HUF	from 7 days to 1 month	6,000,000	3,000,000
GBP-HUF	from 1 month to 3 months	2,500,000	1,250,000
GBP-HUF	from 3 months to 6 months	45,000,000	22,500,000
GBP-JPY	from 1 day to 4 days	100,000	50,000
GBP-JPY	from 4 days to 7 days	100,000	50,000
GBP-JPY	from 7 days to 1 month	100,000	50,000
GBP-JPY	from 1 month to 3 months	35,000,000	17,500,000
GBP-JPY	from 3 months to 6 months	20,000,000	10,000,000
GBP-NOK	from 1 month to 3 months	25,000,000	12,500,000
GBP-NOK	from 3 months to 6 months	3,000,000	1,500,000
GBP-SEK	from 4 days to 7 days	5,000,000	2,500,000
GBP-SEK	from 7 days to 1 month	5,500,000	2,750,000
GBP-SEK	from 1 month to 3 months	45,000,000	22,500,000
GBP-USD	from 1 day to 4 days	100,000	50,000
GBP-USD	from 4 days to 7 days	100,000	50,000
GBP-USD	from 7 days to 1 month	100,000	50,000
GBP-USD	from 1 month to 3 months	15,000,000	7,500,000
GBP-USD	from 3 months to 6 months	400,000	200,000
GBP-USD	from 6 months to 1 year	100,000	50,000
HUF-USD	from 1 day to 4 days	100,000	50,000
HUF-USD	from 4 days to 7 days	225,000,000	112,500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
HUF-USD	from 7 days	to 1 month	30,000,000	15,000,000
HUF-USD	from 1 month	to 3 months	40,000,000	20,000,000
HUF-USD	from 3 months	to 6 months	40,000,000	20,000,000
IDR-USD	from 1 day	to 4 days	20,000,000	10,000,000
IDR-USD	from 4 days	to 7 days	15,000,000	7,500,000
IDR-USD	from 7 days	to 1 month	350,000,000	175,000,000
IDR-USD	from 1 month	to 3 months	10,000,000	5,000,000
IDR-USD	from 3 months	to 6 months	10,000,000	5,000,000
INR-USD	from 1 day	to 4 days	15,000,000	7,500,000
INR-USD	from 4 days	to 7 days	25,000,000	12,500,000
INR-USD	from 7 days	to 1 month	15,000,000	7,500,000
INR-USD	from 1 month	to 3 months	7,500,000	3,750,000
INR-USD	from 3 months	to 6 months	20,000,000	10,000,000
INR-USD	from 6 months	to 1 year	40,000,000	20,000,000
INR-USD	from 1 year	to 2 years	20,000,000	10,000,000
JPY-NZD	from 1 day	to 4 days	100,000	50,000
JPY-NZD	from 4 days	to 7 days	2,500,000	1,250,000
JPY-NZD	from 7 days	to 1 month	100,000	50,000
JPY-NZD	from 1 month	to 3 months	8,000,000	4,000,000
JPY-NZD	from 3 months	to 6 months	3,000,000	1,500,000
JPY-USD	from 1 day	to 4 days	100,000	50,000
JPY-USD	from 4 days	to 7 days	6,000,000	3,000,000
JPY-USD	from 7 days	to 1 month	100,000	50,000
JPY-USD	from 1 month	to 3 months	20,000,000	10,000,000
JPY-USD	from 3 months	to 6 months	30,000,000	15,000,000
KRW-USD	from 1 day	to 4 days	75,000,000	37,500,000
KRW-USD	from 4 days	to 7 days	55,000,000	27,500,000
KRW-USD	from 7 days	to 1 month	35,000,000	17,500,000
KRW-USD	from 1 month	to 3 months	20,000,000	10,000,000
KRW-USD	from 3 months	to 6 months	575,000,000	287,500,000
MXN-USD	from 1 day	to 4 days	2,000,000	1,000,000
MXN-USD	from 4 days	to 7 days	9,500,000	4,750,000
MXN-USD	from 7 days	to 1 month	2,500,000	1,250,000
MXN-USD	from 1 month	to 3 months	6,500,000	3,250,000
MXN-USD	from 3 months	to 6 months	2,000,000	1,000,000
MYR-USD	from 1 day	to 4 days	15,000,000	7,500,000
MYR-USD	from 4 days	to 7 days	30,000,000	15,000,000
MYR-USD	from 7 days	to 1 month	20,000,000	10,000,000
MYR-USD	from 1 month	to 3 months	15,000,000	7,500,000
NOK-USD	from 1 day	to 4 days	600,000	300,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
NOK-USD	from 4 days	to 7 days	15,000,000	7,500,000
NOK-USD	from 7 days	to 1 month	3,500,000	1,750,000
NOK-USD	from 1 month	to 3 months	225,000,000	112,500,000
NOK-USD	from 3 months	to 6 months	2,000,000	1,000,000
NZD-USD	from 1 day	to 4 days	100,000	50,000
NZD-USD	from 4 days	to 7 days	100,000	50,000
NZD-USD	from 7 days	to 1 month	100,000	50,000
NZD-USD	from 1 month	to 3 months	600,000	300,000
NZD-USD	from 3 months	to 6 months	100,000	50,000
PHP-USD	from 1 day	to 4 days	10,000,000	5,000,000
PHP-USD	from 4 days	to 7 days	10,000,000	5,000,000
PHP-USD	from 7 days	to 1 month	15,000,000	7,500,000
PHP-USD	from 1 month	to 3 months	8,000,000	4,000,000
RUB-USD	from 1 day	to 4 days	400,000	200,000
RUB-USD	from 4 days	to 7 days	25,000,000	12,500,000
RUB-USD	from 7 days	to 1 month	3,500,000	1,750,000
RUB-USD	from 1 month	to 3 months	15,000,000	7,500,000
RUB-USD	from 3 months	to 6 months	10,000,000	5,000,000
SEK-USD	from 1 day	to 4 days	500,000	250,000
SEK-USD	from 4 days	to 7 days	15,000,000	7,500,000
SEK-USD	from 7 days	to 1 month	8,000,000	4,000,000
SEK-USD	from 1 month	to 3 months	9,500,000	4,750,000
SEK-USD	from 3 months	to 6 months	200,000	100,000
TRY-USD	from 1 day	to 4 days	1,500,000	750,000
TRY-USD	from 4 days	to 7 days	1,000,000	500,000
TRY-USD	from 7 days	to 1 month	1,000,000	500,000
TRY-USD	from 1 month	to 3 months	6,500,000	3,250,000
TRY-USD	from 3 months	to 6 months	500,000	250,000
TWD-USD	from 1 day	to 4 days	15,000,000	7,500,000
TWD-USD	from 4 days	to 7 days	20,000,000	10,000,000
TWD-USD	from 7 days	to 1 month	20,000,000	10,000,000
TWD-USD	from 1 month	to 3 months	15,000,000	7,500,000
TWD-USD	from 3 months	to 6 months	35,000,000	17,500,000
USD-XAU	from 1 day	to 4 days	100,000	50,000
USD-XAU	from 4 days	to 7 days	100,000	50,000
USD-XAU	from 7 days	to 1 month	100,000	50,000
USD-XAU	from 1 month	to 3 months	125,000,000	62,500,000
USD-XAU	from 3 months	to 6 months	125,000,000	62,500,000
USD-XAU	from 6 months	to 1 year	100,000	50,000
USD-ZAR	from 1 day	to 4 days	8,000,000	4,000,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
USD-ZAR	from 4 days	to 7 days	8,000,000	4,000,000
USD-ZAR	from 7 days	to 1 month	1,000,000	500,000
USD-ZAR	from 1 month	to 3 months	9,000,000	4,500,000
USD-ZAR	from 3 months	to 6 months	2,000,000	1,000,000

Table 49 – Alternative B
Non-deliverable forwards (NDF) – classes not having a liquid market

NON-DELIVERABLE FORWARDS (NDF) - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	100,000	50,000

Spread betting

Threshold selection					
SPREAD BETTING	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value for draft RTS if floor = €100,000
AUD-CAD <1 w eek	20,441	206,040	206,040	200,000	100,000
AUD-JPY <1 w eek	2,777,753	32,080,428	32,080,428	30,000,000	3,000,000
AUD-NZD <1 w eek	35,771	393,239	393,239	400,000	100,000
AUD-USD <1 w eek	31,030	309,299	309,299	300,000	100,000
CAD-JPY <1 w eek	1,834,063	24,592,680	24,592,680	25,000,000	2,000,000
CHF-JPY <1 w eek	2,854,536	19,158,540	19,158,540	20,000,000	3,000,000
EUR-AUD <1 w eek	59,334	591,004	591,004	600,000	100,000
EUR-CAD <1 w eek	55,671	308,284	308,284	300,000	100,000
EUR-CHF <1 w eek	121,805	731,202	731,202	700,000	100,000
EUR-GBP <1 w eek	25,004	329,612	329,612	300,000	100,000
EUR-HUF <1 w eek	30,617,900	31,176,000	31,176,000	30,000,000	30,000,000
EUR-JPY <1 w eek	7,003,700	70,370,000	70,370,000	70,000,000	7,000,000
EUR-NOK <1 w eek	306,546	3,006,432	3,006,432	3,000,000	300,000
EUR-NZD <1 w eek	65,446	194,170	194,170	200,000	100,000
EUR-SEK <1 w eek	227,111	4,479,075	4,479,075	4,500,000	200,000
EUR-TRY <1 w eek	147,448	1,475,095	1,475,095	1,500,000	100,000
EUR-USD <1 w eek	69,281	1,120,000	1,120,000	1,000,000	100,000
GBP-AUD <1 w eek	89,454	746,442	746,442	700,000	100,000
GBP-CAD <1 w eek	67,678	1,116,834	1,116,834	1,000,000	100,000
GBP-CHF <1 w eek	54,919	714,835	714,835	700,000	100,000
GBP-JPY <1 w eek	6,294,031	87,472,265	87,472,265	85,000,000	6,500,000
GBP-NZD <1 w eek	103,142	457,896	457,896	500,000	100,000
GBP-SEK <1 w eek	269,195	1,318,884	1,318,884	1,500,000	300,000
GBP-USD <1 w eek	102,509	2,023,016	2,023,016	2,000,000	100,000
JPY-NZD <1 w eek	1,639,264	21,878,765	21,878,765	20,000,000	1,500,000
USD-CAD <1 w eek	40,576	559,807	559,807	600,000	100,000
USD-CHF <1 w eek	31,878	318,312	318,312	300,000	100,000
USD-CNY <1 w eek	226,048	2,714,340	2,714,340	2,500,000	200,000
USD-DKK <1 w eek	390,732	789,417	789,417	800,000	400,000
USD-HKD <1 w eek	112,452	5,622,069	5,622,069	5,500,000	100,000
USD-JPY <1 w eek	3,725,303	37,666,049	37,666,049	40,000,000	3,500,000
USD-MXN <1 w eek	279,830	4,733,630	4,733,630	4,500,000	300,000
USD-NZD <1 w eek	21,511	268,571	268,571	300,000	100,000
USD-RUB <1 w eek	497,176	13,017,383	13,017,383	15,000,000	500,000
USD-SEK <1 w eek	138,681	1,590,193	1,590,193	1,500,000	100,000
USD-TRY <1 w eek	383,452	1,615,782	1,615,782	1,500,000	400,000
USD-ZAR <1 w eek	376,848	3,879,738	3,879,738	4,000,000	400,000
ALL_OTHERS	43,942	24,214,433	24,214,433	25,000,000	100,000

Table 26: Spread betting - Threshold selection

Table 56 – Alternative B
Spread betting – liquid classes

SPREAD BETTING - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
AUD-CAD	from 1 day	to 4 days	100,000	50,000
AUD-JPY	from 1 day	to 4 days	3,000,000	1,500,000
AUD-NZD	from 1 day	to 4 days	100,000	50,000
AUD-USD	from 1 day	to 4 days	100,000	50,000
CAD-JPY	from 1 day	to 4 days	2,000,000	1,000,000
CHF-JPY	from 1 day	to 4 days	3,000,000	1,500,000
EUR-AUD	from 1 day	to 4 days	100,000	50,000
EUR-CAD	from 1 day	to 4 days	100,000	50,000
EUR-CHF	from 1 day	to 4 days	100,000	50,000
EUR-GBP	from 1 day	to 4 days	100,000	50,000
EUR-HUF	from 1 day	to 4 days	30,000,000	15,000,000
EUR-JPY	from 1 day	to 4 days	7,000,000	3,500,000
EUR-NOK	from 1 day	to 4 days	300,000	150,000
EUR-NZD	from 1 day	to 4 days	100,000	50,000
EUR-SEK	from 1 day	to 4 days	200,000	100,000
EUR-TRY	from 1 day	to 4 days	100,000	50,000
EUR-USD	from 1 day	to 4 days	100,000	50,000
GBP-AUD	from 1 day	to 4 days	100,000	50,000
GBP-CAD	from 1 day	to 4 days	100,000	50,000
GBP-CHF	from 1 day	to 4 days	100,000	50,000
GBP-JPY	from 1 day	to 4 days	6,500,000	3,250,000
GBP-NZD	from 1 day	to 4 days	100,000	50,000
GBP-SEK	from 1 day	to 4 days	300,000	150,000
GBP-USD	from 1 day	to 4 days	100,000	50,000
JPY-NZD	from 1 day	to 4 days	1,500,000	750,000
USD-CAD	from 1 day	to 4 days	100,000	50,000
USD-CHF	from 1 day	to 4 days	100,000	50,000
USD-CNY	from 1 day	to 4 days	200,000	100,000
USD-DKK	from 1 day	to 4 days	400,000	200,000
USD-HKD	from 1 day	to 4 days	100,000	50,000
USD-JPY	from 1 day	to 4 days	3,500,000	1,750,000
USD-MXN	from 1 day	to 4 days	300,000	150,000
USD-NZD	from 1 day	to 4 days	100,000	50,000
USD-RUB	from 1 day	to 4 days	500,000	250,000
USD-SEK	from 1 day	to 4 days	100,000	50,000
USD-TRY	from 1 day	to 4 days	400,000	200,000
USD-ZAR	from 1 day	to 4 days	400,000	200,000

Table 57 – Alternative B
Spread betting – classes not having a liquid market

SPREAD BETTING - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	100,000	50,000

LIS threshold floors table

Section 11
LIS threshold floors

Table 47 – Alternative B
LIS threshold floors

CLASS OF FINANCIAL INSTRUMENTS	LIS THRESHOLD FLOOR	
FOREIGN EXCHANGE DERIVATIVES		
Non-deliverable Forwards (NDF)	EUR	100,000
Deliverable Forwards (DF)	EUR	1,000,000
FX Options	EUR	1,000,000
FX Swaps	EUR	1,000,000
Spread betting	EUR	100,000
FX Futures	EUR	100,000

2.2. Credit derivatives

Liquid market definition

[Section 3.5 of the CP- Liquid market definition for non-equity financial instruments]

1. ESMA undertook an analysis on credit derivatives based on trade repositories (TRs) data. Data was collected over the period 1 March 2014 – 31 May 2014 and required an extensive cleaning and screening phase (for further details refer to Annex 2.2.1) that enabled identification of the following classes defined by a combination of contract type and underlying :
 - i. CDS:
 - a. CDS Index
 - b. Single name CDS
 - c. Bespoke basket CDS
 - ii. CDS options:
 - a. CDS index options
 - b. Single name CDS options
2. The following chart and tables represent the distribution of notional amount recorded over the three-month period between the above classes:

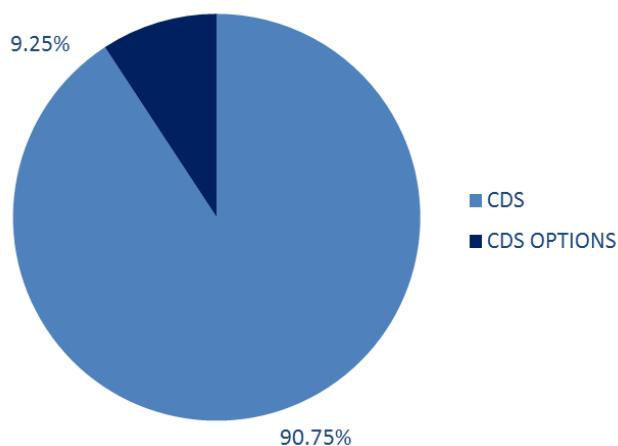


Chart 3: Credit derivatives – notional amount distribution

Underlying	Number of days traded	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day
Index	80	118,657	1,825	6,027,514,365,142	92,730,990,233
Single Name	81	436,416	6,714	2,737,616,060,410	42,117,170,160
Bespoke Basket	69	934	14	52,658,669,295	810,133,374
TOTAL		556,007	8,554	8,817,789,094,847	135,658,293,767

Table 27: CDS statistics

Underlying	Number of days traded	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day
Index	66	10,101	155	898,190,752,873	13,818,319,275
Single Name	11	27	0.4	111,315,719	1,712,550
TOTAL		10,128	156	898,302,068,592	13,820,031,824

Table 28: CDS options statistics

3. The first step of the analysis required the classification of the above classes as liquid or illiquid on the basis of the following criteria:
 - i. average notional amount per day²⁹ greater or equal to €500 m ('notional amount per day' both in the above tables and in the following ones);
 - ii. number of days traded greater or equal to 80% of the available trading days in the period³⁰;
 - iii. average number of trades per day³¹ greater or equal to 100 ('number of trades per day' both in the above tables and in the following ones).
4. On the basis of the above the following classes were defined to be illiquid as a whole:
 - i. Bespoke basket CDS;

²⁹ Calculated as total notional amount traded divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

³⁰ Calculated as the number of different days on which a trade was recorded divided by the number of trading days over the period, considered to be 65. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

³¹ Calculated as total number of trades divided by the number of trading days over the period, considered to be 65.

- ii. Single name CDS options.
5. The following tables provide for each class of credit derivatives statistics on the number of trades, the notional amount and traded days and, the final classification of the class as liquid or illiquid on the basis of the thresholds defined above.

CDS	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Index	118,657	21.34%	1,825.5	6,027,514,365,142	68.36%	92,730,990,233	80	123%	LIQUID
Single Name	436,416	78.49%	6,714.1	2,737,616,060,410	31.05%	42,117,170,160	81	125%	LIQUID
Bespoke Basket	934	0.17%	14.4	52,658,669,295	0.60%	810,133,374	69	106%	ILLIQUID
Total	556,007	100.00%	8,554.0	8,817,789,094,847	100.00%	135,658,293,767			

CDS Options	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Index	10,101	99.73%	155.4	898,190,752,873	99.99%	13,818,319,275	66	102%	LIQUID
Single Name	27	0.27%	0.4	111,315,719	0.01%	1,712,550	11	17%	ILLIQUID
Total	10,128	100.00%	155.8	898,302,068,592	100.00%	13,820,031,824			

Table 29: Credit derivatives statistics (part I)³²

6. The subsequent step of the analysis consisted in further refining the liquid classes into liquid and illiquid sub-classes by means of an additional set of qualitative criteria and to assess the liquidity of each sub-class on the basis of quantitative thresholds, defined per class in terms of:
- average number of trades per day; and
 - average notional amount per day.
7. The table below summarises per asset class the following information:
- the criteria used to define the related sub-classes (columns “Criterion to define sub-classes #1”, “Criterion to define sub-classes #2”, “Criterion to define sub-classes #3” and “Criterion to define sub-classes #4”). The criteria used may vary per asset class, e.g. for CDS Index 4 criteria are used to sub-categorise the class, namely: tenor, notional currency, underlying index and on/off-the-run status of the index;

³² 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

- ii. the total number of sub-classes identified using such criteria (column “Total num of sub-classes”), e.g. for CDS Index 53 sub-classes were defined,
- iii. the related number of sub-classes deemed to be liquid (column “Num of liquid sub-classes”) on the basis of the two quantitative criteria provided in the two subsequent columns (“Trades per day threshold” and “Notional per day (m EUR) threshold”), e.g. for CDS Index a total number of 25 sub-classes are qualified as liquid since they recorded on average 1 trade and €10 m of notional amount per day;
- iv. the last two columns provide the percentage of trades and notional amount related to the liquid sub-classes (refer to columns “% of trades captured” and “% of notional amount captured”).

CDS	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Criterion to define sub-classes #4	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Index	Tenor	Notional Currency	Undelying Index Name	On/Off-the-run status	53	25	1.0	10	98%	98%
Single Name	Tenor	Notional Currency	Underlying Issuer type		42	18	2.0	100	97%	98%
CDS Options	Criterion to define sub-classes #1	Criterion to define sub-classes #2	Criterion to define sub-classes #3	Criterion to define sub-classes #4	Total num of sub-classes	Num of liquid sub-classes	Trades per day threshold	Notional per day (m EUR) threshold	% of trades captured	% of notional amount captured
Index	Tenor	Notional Currency	Undelying Index Name	On/Off-the-run status	28	10	2.0	100	94%	98%

Table 30: Credit derivatives statistics (part II)

8. In the next sections the qualitative criteria to define the sub-classes and the results per sub-class in relation to the liquidity assessment are presented in more detail for each class qualified as liquid:
 - i. CDS index;
 - ii. Single name CDS;
 - iii. CDS index options.

CDS Index

9. The qualitative criteria used to define the sub-classes for CDS Indices are the following:
- i. the underlying index;
 - ii. the tenor: calculated as the difference between the maturity date and the execution date. In particular, the tenor is denominated as “x years” where x is the number obtained by rounding up the ratio of days between maturity and execution date and 365 (e.g. 2.3) to the next whole number (3 years in this case). As a result, for the purpose of calculating the figures included in the table below [Table 36: CDS Index - liquidity assessment] a sub-class assigned with a tenor of “x years” includes all contracts with a maturity of more than “x-1 years” and less or equal to “x years” (e.g. 2 years < 3 year tenor ≤ 3 years).
 - iii. the notional currency, i.e. the currency in which the contract is denominated;
 - iv. the on/off-the-run status: a trade was deemed to be executed on an on-the-run index if the execution date was in between the on-the-run-period for the index starting 5 days before the roll-over of the index, i.e. 5 days before its composition (e.g. version x of the index) was effective, and ending 30 days after the next roll-over, i.e. the date on which the new composition of the index (e.g. version x+1 of the index) was effective. As a result, for 35 days versions “x” and “x+1” will be both on the run (refer to the chart below).

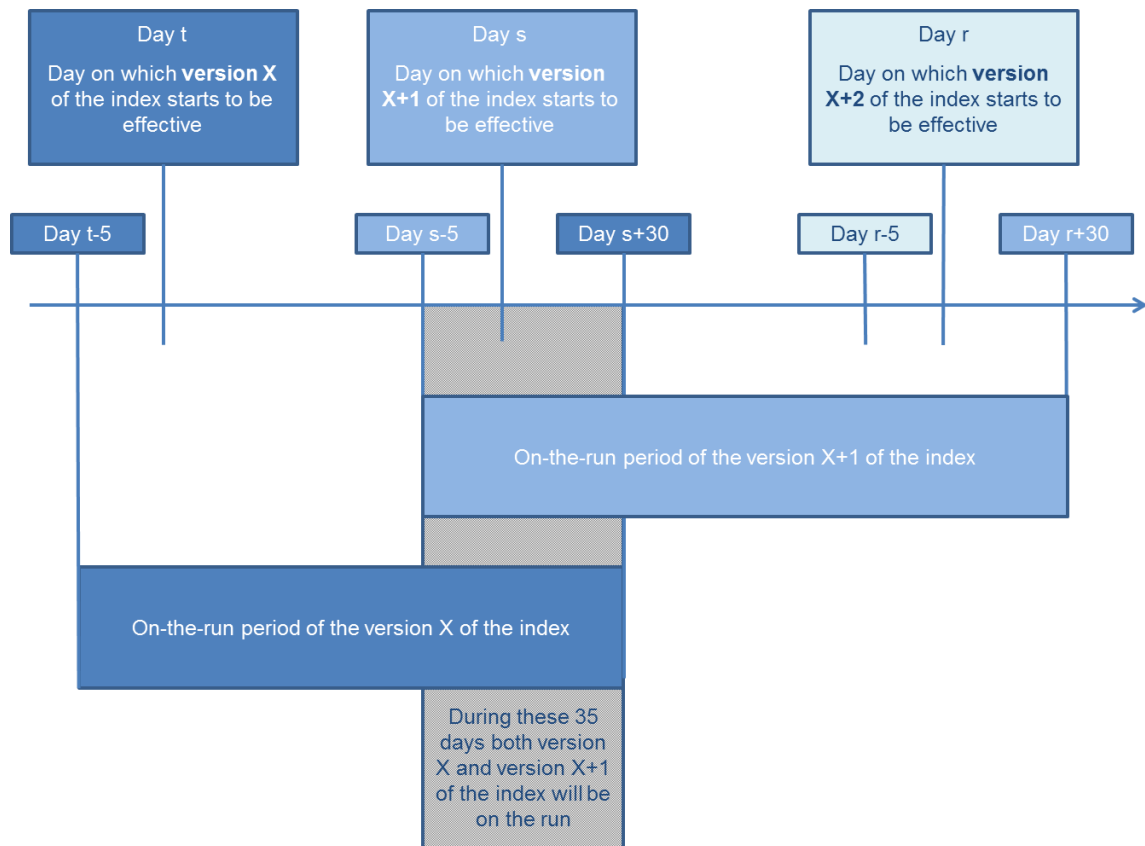


Chart 4: On-the-run index period - example

However, it was not possible to disentangle tranched vs. untranched indices.

10. In order to define the liquid sub-classes a 2-step approach was followed. First, each qualitative criterion was assessed individually over the whole sample and subsequently, in order to support and validate the results; calculations were performed for each sub-class defined on the basis of the combination of all qualitative criteria. However, this final assessment of liquidity was based on a smaller data sample since for roughly 70% of records the calculation of the tenor was not possible due to quality issues of the data.
11. The subsequent tables provide the analysis for each individual qualitative criterion selected.

Index Family	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
iTraxx	73,361	4,483,405,951,739	1,128.63	68,975,476,181
CDX	29,806	1,342,958,611,478	458.55	20,660,901,715
IOS	3,605	74,750,661,642	55.46	1,150,010,179
CMBX	9,592	50,751,464,978	147.57	780,791,769
Dow Jones CDX	222	26,509,774,912	3.42	407,842,691
ABX	529	14,955,385,387	8.14	230,082,852
MBX	390	13,201,886,552	6.00	203,105,947
LCDX	543	12,429,983,099	8.35	191,230,509
MCDX	501	8,075,944,313	7.71	124,245,297
PRIMEX	108	474,701,042	1.66	7,303,093

Table 31: CDS Index - index family

Notional Currency	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
EUR	67,534	4,401,412,243,479	1,038.98	67,714,034,515
USD	49,097	1,615,041,630,611	755.34	24,846,794,317
JPY	1,997	10,619,700,964	30.72	163,380,015
GBP	3	327,645,340	0.05	5,040,698
SEK	26	113,144,748	0.40	1,740,688

Table 32: CDS Index - notional currency

Tenor	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
5 years	14,712	1,679,300,329,091	226.34	25,835,389,678
6 years	17,759	942,547,522,982	273.22	14,500,731,123
4 years	1,221	343,956,316,129	18.78	5,291,635,633
3 years	614	128,537,929,639	9.45	1,977,506,610
2 years	324	58,246,844,183	4.98	896,105,295
10 years	684	48,342,058,505	10.52	743,723,977
11 years	367	48,256,630,093	5.65	742,409,694
9 years	91	11,001,524,647	1.40	169,254,225
8 years	57	6,732,410,669	0.88	103,575,549
1 years	41	6,629,650,800	0.63	101,994,628
7 years	47	3,082,331,605	0.72	47,420,486

Table 33: CDS Index – tenor

On/Off-the-run status	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
Y	90,940	3,680,622,769,333	1,399.08	56,624,965,682
N	22,162	2,196,650,363,387	340.95	33,794,620,975

Table 34: CDS Index - on/off-the-run status

Index name	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
iTraxx_iTraxx Europe	33,945	3,114,234,352,277	522.23	47,911,297,727
CDX_CDX.NA.IG	12,186	930,590,884,625	187.48	14,316,782,840
iTraxx_iTraxx Europe Crossover	25,010	804,877,858,121	384.77	12,382,736,279
iTraxx_iTraxx Europe Senior Financials	7,391	440,244,126,126	113.71	6,772,986,556
CDX_CDX.NA.HY	13,296	344,900,699,219	204.55	5,306,164,603
IOS_IOS.FN30	3,581	73,870,727,357	55.09	1,136,472,729
CDX_CDX.EM	4,304	63,096,966,323	66.22	970,722,559
iTraxx_iTraxx Europe Sub Financials	1,022	34,867,790,208	15.72	536,427,542
iTraxx_iTraxx Asia ex-Japan IG	2,114	30,493,522,274	32.52	469,131,112
Dow Jones CDX_Dow Jones CDX.NA.IG	220	26,467,711,414	3.38	407,195,560
iTraxx_iTraxx Australia	1,212	25,283,219,073	18.65	388,972,601
CMBX_CMBX.NA.AAA	2,597	21,694,344,648	39.95	333,759,148
MBX_MBX FN30	388	13,200,436,086	5.97	203,083,632
LCDX_LCDX.NA	543	12,429,983,099	8.35	191,230,509
iTraxx_iTraxx SovX Western Europe	155	11,278,397,354	2.38	173,513,805
iTraxx_iTraxx Japan	1,997	10,619,700,964	30.72	163,380,015
MCDX_MCDX.NA	501	8,075,944,313	7.71	124,245,297
iTraxx_iTraxx Europe HiVol	168	7,511,797,058	2.58	115,566,109
CMBX_CMBX.NA.AJ	823	5,902,616,831	12.66	90,809,490
ABX_ABX.HE.AAA	190	5,734,888,260	2.92	88,229,050
CMBX_CMBX.NA.AA	1,059	4,557,552,742	16.29	70,116,196
CMBX_CMBX.NA.A	1,251	4,413,317,380	19.25	67,897,190
CDX_CDX.NA	10	4,227,382,645	0.15	65,036,656
CMBX_CMBX.NA.BBB-	1,202	4,056,972,224	18.49	62,414,957
CMBX_CMBX.NA.AM	628	3,709,999,424	9.66	57,076,914
ABX_ABX.HE.A	112	3,286,273,746	1.72	50,558,058
CMBX_CMBX.NA.BB	1,632	2,958,113,561	25.11	45,509,439
ABX_ABX.HE.BBB	48	2,663,338,783	0.74	40,974,443
CMBX_CMBX.NA.AS	373	1,885,142,129	5.74	29,002,187
CMBX_CMBX.NA.BBB	27	1,573,406,040	0.42	24,206,247

Index name	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
ABX_ABX.HE.PENAAA	58	1,322,003,430	0.89	20,338,514
ABX_ABX.HE.AA	105	1,303,798,123	1.62	20,058,433
iTraxx_iTraxx SovX Asia Pacific	62	1,023,167,021	0.95	15,741,031
iTraxx_iTraxx SovX CEEMEA	99	886,526,795	1.52	13,638,874
IOS_IOS.GI3	24	879,934,285	0.37	13,537,451
iTraxx_iTraxx SovX CEEMEA ex-EU	41	840,195,426	0.63	12,926,083
iTraxx_iTraxx CEEMEA	119	824,272,036	1.83	12,681,108
ABX_ABX.HE.BBB-	16	645,083,045	0.25	9,924,355
PRIMEX_ARM	104	393,126,901	1.60	6,048,106
CDX_CDX.NA.IG.HVOL	8	126,045,446	0.12	1,939,161
iTraxx_iTraxx Europe Industrials	5	95,000,000	0.08	1,461,538
PRIMEX_FRM	4	81,574,141	0.06	1,254,987
iTraxx_iTraxx Europe Consumer Cyclical	3	75,000,000	0.05	1,153,846
iTraxx_iTraxx Europe Non-Financial	1	55,000,000	0.02	846,154
iTraxx_iTraxx Europe Autos	2	50,000,000	0.03	769,231
iTraxx_iTraxx Europe Energy	5	50,000,000	0.08	769,231
iTraxx_iTraxx Europe Consumers	3	35,000,000	0.05	538,462
Dow Jones CDX_Dow Jones CDX.NA.IG.HVOL	1	32,635,472	0.02	502,084
iTraxx_iTraxx SDI-75	2	24,270,025	0.03	373,385
iTraxx_iTraxx Asia ex-Japan HY	3	21,756,982	0.05	334,723
CDX_CDX.EM.ex-EU	2	16,633,218	0.03	255,896
iTraxx_iTraxx Europe TMT	2	15,000,000	0.03	230,769
Dow Jones CDX_Dow Jones CDX.NA.HY	1	9,428,025	0.02	145,047
MBX_MBX GI3	2	1,450,465	0.03	22,315

Table 35: CDS Index - index name

12. The tables above indicate that liquidity is concentrated in:

- i. the CDX and iTraxx index families;
- ii. CDS contracts denominated in Euro (EUR), US dollars (USD) and Japanese Yen (JPY);
- iii. contracts with tenors, as previously defined, from 2 to 6 years and 10 and 11 years;
- iv. contracts executed on on-the-run indices;
- v. contracts executed on the following indices, which all recorded on average more than €500m notional amount per day over the period:
 - a. iTraxx Europe;

- b. CDX.NA.IG;
 - c. iTraxx Europe Crossover;
 - d. iTraxx Europe Senior Financials;
 - e. CDX.NA.HY;
 - f. IOS.FN30;
 - g. CDX.EM;
 - h. iTraxx Europe Sub Financials.
13. The table below overall confirms the above conclusions and presents the detailed results per sub-class in relation to the assessment of liquidity including only the records for which it was possible to calculate the tenor. In particular, the main differences in comparison to the above results are the following:
- i. liquid sub-classes include contracts denominated in Euro (EUR) or US dollar (USD) but not in Japanese Yen (JPY);
 - ii. liquid sub-classes include contracts executed on all the above indices with the exception of:
 - a. IOS.FN30 and;
 - b. iTraxx Europe Sub Financials.
14. Even though the statistics and the assessment of the liquidity of the sub-classes were performed on sub-classes defined using 3 of the 4 criteria presented at the beginning of the section, i.e. excluding the fourth criterion “on/off-the-run status”, this criterion is used in determining the liquid sub-classes. In other words, the sub-classes presented in the tables below are liquid if the index is on-the-run. As an example, the sub-class “iTraxx_iTraxx Europe_5 years_EUR” is liquid only if the iTraxx Europe index is on-the-run, and illiquid otherwise.
15. The inclusion of the fourth criterion in the calculations would have implied a further reduction of the sample used and it would have undermined the robustness of the results.
16. Last but not least, on the top of the table the quantitative criteria applied to assess the liquidity and on which the “Liquidity Flag” is based are indicated. Moreover, the notional amount represents the notional amount traded whose value was then converted into

Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered³³.

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					1.00
ESMA_KEY	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
iTraxx_iTraxx Europe_5 years_EUR	6,577	101.18	1,120,772,351,897	17,242,651,567.64	Liquid
iTraxx_iTraxx Europe_6 years_EUR	8,855	136.23	561,834,613,433	8,643,609,437.43	Liquid
iTraxx_iTraxx Europe Crossover_5 years_EUR	5,495	84.54	281,270,192,946	4,327,233,737.63	Liquid
iTraxx_iTraxx Europe_4 years_EUR	444	6.83	234,001,862,859	3,600,028,659.37	Liquid
iTraxx_iTraxx Europe Crossover_6 years_EUR	5,820	89.54	180,092,192,588	2,770,649,116.74	Liquid
CDX_CDXNA.IG_5 years_USD	965	14.85	142,865,463,821	2,197,930,212.63	Liquid
iTraxx_iTraxx Europe Senior Financials_5 years_EUR	607	9.34	97,790,215,005	1,504,464,846.23	Liquid
CDX_CDXNA.IG_6 years_USD	713	10.97	91,552,986,595	1,408,507,486.08	Liquid
iTraxx_iTraxx Europe Senior Financials_6 years_EUR	1,552	23.88	74,851,162,730	1,151,556,349.69	Liquid
iTraxx_iTraxx Europe_3 years_EUR	183	2.82	62,965,277,067	968,696,570.26	Liquid
iTraxx_iTraxx Europe_11 years_EUR	335	5.15	42,710,775,500	657,088,853.85	Liquid
iTraxx_iTraxx Europe_10 years_EUR	644	9.91	42,591,963,874	655,260,982.68	Liquid
iTraxx_iTraxx Europe Crossover_4 years_EUR	272	4.18	37,912,301,805	583,266,181.61	Liquid
iTraxx_iTraxx Europe Senior Financials_4 years_EUR	267	4.11	34,807,814,371	535,504,836.48	Liquid
iTraxx_iTraxx Europe_2 years_EUR	68	1.05	28,676,822,527	441,181,885.03	Liquid
iTraxx_iTraxx Europe Senior Financials_3 years_EUR	181	2.78	27,496,381,834	423,021,258.98	Liquid
CDX_CDXNA.HY_5 years_USD	690	10.62	26,586,579,254	409,024,296.22	Liquid
CDX_CDXNA.IG_4 years_USD	88	1.35	20,778,662,682	319,671,733.57	Liquid
iTraxx_iTraxx Europe Crossover_3 years_EUR	147	2.26	20,409,857,506	313,997,807.78	Liquid
CDX_CDXNA.HY_6 years_USD	301	4.63	18,454,469,000	283,914,907.69	Liquid
iTraxx_iTraxx Europe Senior Financials_2 years_EUR	117	1.80	18,357,794,819	282,427,612.60	Liquid
CDX_CDXEM_6 years_USD	516	7.94	15,742,098,636	242,186,132.86	Liquid
CDX_CDXNA.IG_3 years_USD	24	0.37	11,011,447,494	169,406,884.52	Illiquid
iTraxx_iTraxx Europe_9 years_EUR	81	1.25	10,152,715,900	156,195,629.23	Liquid
CDX_CDXEM_5 years_USD	363	5.58	9,673,726,167	148,826,556.42	Liquid
CDX_CDXNA.HY_4 years_USD	77	1.18	9,247,036,684	142,262,102.82	Liquid
CDX_CDXNA.IG_10 years_USD	40	0.62	5,750,094,631	88,462,994.32	Illiquid
CDX_CDXNA.IG_11 years_USD	32	0.49	5,545,854,593	85,320,839.89	Illiquid
iTraxx_iTraxx Europe Crossover_2 years_EUR	60	0.92	5,066,648,859	77,948,443.98	Illiquid
iTraxx_iTraxx Europe_8 years_EUR	44	0.68	4,339,142,700	66,756,041.54	Illiquid

³³ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

					Criteria applied for liquidity classification
Notional Amount per day					10,000,000
Num of trades per day					1.00
ESMA_KEY	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
CDX_CD_XNA_4 years_USD	10	0.15	4,227,382,645	65,036,656.07	Illiquid
CDX_CD_XNA.HY_3 years_USD	37	0.57	4,013,000,906	61,738,475.48	Illiquid
CDX_CD_XNA.IG_1 years_USD	22	0.34	3,556,945,575	54,722,239.62	Illiquid
CDX_CD_XNA.IG_2 years_USD	32	0.49	3,081,659,814	47,410,150.98	Illiquid
CDX_CD_XNA.IG_8 years_USD	13	0.20	2,393,267,969	36,819,507.21	Illiquid
CDX_CD_XNA.IG_7 years_USD	13	0.20	2,157,059,673	33,185,533.42	Illiquid
iTraxx_iTraxx Europe_1 years_EUR	4	0.06	2,047,328,666	31,497,364.09	Illiquid
CDX_CD_XEM_4 years_USD	25	0.38	1,642,245,083	25,265,308.98	Illiquid
CDX_CD_XNA.HY_2 years_USD	20	0.31	1,499,710,912	23,072,475.57	Illiquid
CDX_CD_XEM_3 years_USD	14	0.22	1,410,180,636	21,695,086.70	Illiquid
iTraxx_iTraxx Europe HiVol_4 years_EUR	38	0.58	1,339,010,000	20,600,153.85	Illiquid
iTraxx_iTraxx Europe HiVol_3 years_EUR	28	0.43	1,231,784,196	18,950,526.09	Illiquid
iTraxx_iTraxx Europe HiVol_2 years_EUR	19	0.29	1,015,697,666	15,626,117.94	Illiquid
iTraxx_iTraxx Europe_7 years_EUR	34	0.52	925,271,932	14,234,952.80	Illiquid
CDX_CD_XNA.IG_9 years_USD	10	0.15	848,808,747	13,058,596.10	Illiquid
CDX_CD_XEM_2 years_USD	6	0.09	534,004,932	8,215,460.49	Illiquid
iTraxx_iTraxx Europe HiVol_1 years_EUR	4	0.06	512,000,000	7,876,923.08	Illiquid
iTraxx_iTraxx Europe Crossover_1 years_EUR	7	0.11	440,998,333	6,784,589.74	Illiquid
iTraxx_iTraxx Europe HiVol_5 years_EUR	15	0.23	341,800,000	5,258,461.54	Illiquid
CDX_CD_XNA.HY_1 years_USD	3	0.05	68,897,108	1,059,955.51	Illiquid
iTraxx_iTraxx Europe Sub Financials_6 years_EUR	2	0.03	20,000,000	307,692.31	Illiquid
CDX_CD_XNA.IG.HVOL_2 years_USD	2	0.03	14,504,654	223,148.53	Illiquid
CDX_CD_XNA.IG.HVOL_1 years_USD	1	0.02	3,481,117	53,555.65	Illiquid

Table 36: CDS Index - liquidity assessment³⁴

³⁴ The ESMA KEY is composed as follows: "Index family name"_"Index name"_"tenor"_"notional currency". Be aware that the sub-class is qualified as liquid only if the index is on-the-run, illiquid otherwise

Single Name CDS

17. For Single name CDS the following qualitative criteria were considered to define the sub-classes:
 - a. the underlying type, i.e. whether the issuer is a sovereign entity or a corporation. In particular, EU Sovereign, Non-EU Sovereign and Other Public Entities are classified as sovereign issuers. All non-sovereign issuers are classified as corporate;
 - b. the tenor: calculated as the difference between the maturity date and the execution date. In particular, the tenor is denominated as “x years” where x is the number obtained by rounding up the ratio of days between maturity and execution date and 365 (e.g. 2.3) to the next whole number (3 years in this case). As a result, for the purpose of calculating the figures included in the table below [Table 41: Single name CDS - liquidity assessment] a sub-class assigned with a tenor of “x years” includes all contracts with a maturity of more than “x-1 years” and less or equal to “x years” (e.g. 2 years < 3 year tenor ≤ 3 years).
 - c. the notional currency, i.e. the currency in which the contract is denominated.
18. As in the case of index CDS a 2-step approach was followed. First, each qualitative criterion was assessed individually and subsequently, calculations were performed for each sub-class defined on the basis of the combination of all qualitative criteria. However, for roughly 72% of records the calculation of the tenor was not possible due to quality issues of the data. As a result, the remaining records of the data set were used in the calculation of the second step.
19. The subsequent set of tables provides the analysis for each individual qualitative criterion selected.

Notional Currency	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
USD	43,317	566,688,756,288	666.42	8,718,288,558
EUR	1,181	20,820,456,891	18.17	320,314,721
GBP	104	3,414,455,027	1.60	52,530,077
BRL	23	820,472,843	0.35	12,622,659
JPY	101	379,644,212	1.55	5,840,680
COP	7	223,086,988	0.11	3,432,108
TRY	14	110,564,794	0.22	1,700,997
PEN	4	86,326,538	0.06	1,328,101
IDR	23	27,773,071	0.35	427,278
RSD	8	18,835,414	0.12	289,776
CNY	3	16,070,814	0.05	247,243
GHS	5	15,747,052	0.08	242,262
HKD	2	2,057,114	0.03	31,648
INR	-	-	-	-
SGD	-	-	-	-
CHF	-	-	-	-
CAD	-	-	-	-
SEK	-	-	-	-
AUD	-	-	-	-
RUB	-	-	-	-
NZD	-	-	-	-
NGN	-	-	-	-
ZAR	-	-	-	-
Total	44,792	592,624,247,047	689	9,117,296,108

Table 37: Sovereign single name CDS - notional currency

Notional Currency	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
EUR	210,795	1,286,107,567,155	3,243.00	19,786,270,264
USD	177,514	845,964,691,898	2,730.98	13,014,841,414
JPY	3,074	9,205,632,353	47.29	141,625,113
GBP	148	1,953,020,836	2.28	30,046,474
AUD	5	1,034,479,318	0.08	15,915,066
RUB	4	258,545,533	0.06	3,977,624
NZD	2	224,040,151	0.03	3,446,772
SEK	5	51,372,989	0.08	790,354
CHF	32	48,317,590	0.49	743,348
NGN	2	38,278,135	0.03	588,894
ZAR	7	34,418,676	0.11	529,518
HKD	25	24,853,683	0.38	382,364
CNY	5	20,197,885	0.08	310,737
INR	1	18,066,694	0.02	277,949
SGD	4	7,209,177	0.06	110,910
CAD	1	1,121,291	0.02	17,251
BRL	-	-	-	-
COP	-	-	-	-
TRY	-	-	-	-
PEN	-	-	-	-
IDR	-	-	-	-
RSD	-	-	-	-
GHS	-	-	-	-
Total	391,624	2,144,991,813,363	6,025	32,999,874,052

Table 38: Corporate single name CDS - notional currency

20. From the tables on the notional currency it appears that for sovereign single name CDS liquidity is mainly concentrated in contracts denominated in US dollars (USD) while for corporate single name CDS in contracts denominated in Euros (EUR) and US dollars (USD).

Tenor	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
5 years	1,010	35,125,642,491	15.54	540,394,500
6 years	1,517	27,864,343,967	23.34	428,682,215
4 years	625	19,013,555,572	9.62	292,516,240
3 years	613	16,274,739,020	9.43	250,380,600
2 years	542	15,893,448,844	8.34	244,514,598
1 years	508	13,901,841,084	7.82	213,874,478
9 years	143	2,636,771,381	2.20	40,565,714
7 years	182	2,045,351,272	2.80	31,466,943
8 years	168	1,910,028,012	2.58	29,385,046
10 years	145	1,467,870,666	2.23	22,582,626
11 years	61	479,070,777	0.94	7,370,320
15 years	4	21,666,577	0.06	333,332
12 years	-	-	-	-
Total	5,518	136,634,329,664	85	2,102,066,610

Table 39: Sovereign single name CDS - tenor

Tenor	Num of trades	Notional Amount	Num of trades per day	Notional Amount per day
5 years	27,916	239,015,061,896	429.48	3,677,154,798
4 years	22,160	177,463,110,950	340.92	2,730,201,707
3 years	18,805	162,309,133,615	289.31	2,497,063,594
2 years	15,616	137,092,649,977	240.25	2,109,117,692
1 years	13,053	124,674,660,513	200.82	1,918,071,700
6 years	17,273	122,862,238,962	265.74	1,890,188,292
7 years	1,525	6,042,092,167	23.46	92,955,264
8 years	964	2,935,906,712	14.83	45,167,796
9 years	300	1,068,173,977	4.62	16,433,446
10 years	200	873,982,849	3.08	13,445,890
11 years	114	715,404,506	1.75	11,006,223
12 years	2	364,050,378	0.03	5,600,775
15 years	-	-	-	-
Total	117,928	975,416,466,501	1,814	15,006,407,177

Table 40: Corporate single name CDS - tenor

21. From the tables on tenor, it appears that for both, corporate and sovereign single name CDS with 1 to 6 years tenors, as previously defined, are the most liquid. The statistics on

tenor are based on 28% of the whole data sample since for the other records it was not possible to calculate the tenor of the contracts.

22. In conclusion, from the above analysis liquid classes should be:

- i. contracts on corporate single name CDS denominated either in US dollars or in Euro and with tenors, as previously defined, from 1 to 6 years;
- ii. contracts on sovereign single name CDS denominated in US dollars and with tenors, as previously defined, from 1 to 6 years.

23. The above results are confirmed by the following table which presents the detailed results per sub-class in relation to the assessment of liquidity including only the records for which it was possible to calculate the tenor. Each sub-class includes all CDS contracts having the characteristics defined by the field “ESMA_KEY” (e.g. the sub-class Corporate_5 years_EUR includes all CDS contracts whose tenor is between 4 and 5 years, denominated in Euro and whose reference entity is not sovereign) On the top of the table are indicated the quantitative criteria applied to assess the liquidity and on which the “Liquidity Flag” is based. Moreover, the notional amount represents the notional amount traded, the value of which was then converted into Euros on the basis of the simple average of the ECB exchange rate over the three-month period considered³⁵.

					Criteria applied for liquidity classification
					100,000,000
					2.00
ESMA_KEY	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
Corporate_5 years_EUR	22,696	349.17	194,686,973,737	2,995,184,211.33	Liquid
Corporate_4 years_EUR	17,900	275.38	143,979,591,611	2,215,070,640.17	Liquid
Corporate_3 years_EUR	16,136	248.25	138,932,599,226	2,137,424,603.48	Liquid
Corporate_2 years_EUR	13,619	209.52	121,349,182,735	1,866,910,503.62	Liquid
Corporate_1 years_EUR	11,400	175.38	105,765,944,831	1,627,168,382.01	Liquid
Corporate_6 years_EUR	13,174	202.68	93,085,837,275	1,432,089,804.23	Liquid
Corporate_5 years_USD	5,220	80.31	44,328,088,159	681,970,587.06	Liquid
Corporate_4 years_USD	4,260	65.54	33,483,519,339	515,131,066.75	Liquid
Corporate_6 years_USD	4,099	63.06	29,776,401,687	458,098,487.49	Liquid
Sovereign_5 years_USD	1,010	15.54	35,125,642,491	540,394,499.86	Liquid

³⁵ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used

					Criteria applied for liquidity classification
Notional Amount per day					100,000,000
Num of trades per day					2.00
ESMA_KEY	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
Corporate_3 years_USD	2,669	41.06	23,376,534,389	359,638,990.60	Liquid
Sovereign_6 years_USD	1,516	23.32	27,814,343,967	427,912,984.12	Liquid
Corporate_1 years_USD	1,653	25.43	18,908,715,682	290,903,318.19	Liquid
Corporate_2 years_USD	1,997	30.72	15,743,467,242	242,207,188.34	Liquid
Sovereign_4 years_USD	624	9.60	19,008,555,572	292,439,316.49	Liquid
Sovereign_3 years_USD	612	9.42	16,269,739,020	250,303,677.23	Liquid
Sovereign_2 years_USD	538	8.28	15,874,948,844	244,229,982.22	Liquid
Sovereign_1 years_USD	461	7.09	12,096,528,163	186,100,433.28	Liquid
Corporate_7 years_EUR	1,091	16.78	4,321,669,005	66,487,215.46	Illiquid
Corporate_8 years_EUR	798	12.28	2,310,538,426	35,546,745.02	Illiquid
Sovereign_9 years_USD	143	2.20	2,636,771,381	40,565,713.55	Illiquid
Sovereign_1 years_GBP	46	0.71	1,795,312,920	27,620,198.77	Illiquid
Corporate_7 years_USD	434	6.68	1,720,423,162	26,468,048.64	Illiquid
Sovereign_8 years_USD	166	2.55	1,904,028,012	29,292,738.65	Illiquid
Sovereign_7 years_USD	182	2.80	2,045,351,272	31,466,942.65	Illiquid
Sovereign_10 years_USD	145	2.23	1,467,870,666	22,582,625.64	Illiquid
Corporate_8 years_USD	166	2.55	625,368,286	9,621,050.56	Illiquid
Corporate_10 years_EUR	150	2.31	607,850,000	9,351,538.46	Illiquid
Corporate_11 years_EUR	107	1.65	584,500,000	8,992,307.69	Illiquid
Corporate_9 years_EUR	154	2.37	547,190,000	8,418,307.69	Illiquid
Corporate_9 years_USD	146	2.25	520,983,977	8,015,138.11	Illiquid
Corporate_12 years_GBP	2	0.03	364,050,378	5,600,775.04	Illiquid
Corporate_10 years_USD	50	0.77	266,132,849	4,094,351.52	Illiquid
Sovereign_11 years_USD	61	0.94	479,070,777	7,370,319.65	Illiquid
Corporate_11 years_USD	7	0.11	130,904,506	2,013,915.47	Illiquid
Sovereign_6 years_EUR	1	0.02	50,000,000	769,230.77	Illiquid
Sovereign_15 years_USD	4	0.06	21,666,577	333,331.96	Illiquid
Sovereign_2 years_EUR	4	0.06	18,500,000	284,615.38	Illiquid
Sovereign_1 years_EUR	1	0.02	10,000,000	153,846.15	Illiquid
Sovereign_8 years_EUR	2	0.03	6,000,000	92,307.69	Illiquid
Sovereign_3 years_EUR	1	0.02	5,000,000	76,923.08	Illiquid
Sovereign_4 years_EUR	1	0.02	5,000,000	76,923.08	Illiquid

Table 41: Single name CDS - liquidity assessment³⁶

³⁶ The ESMA KEY is composed as follows: "Issuer type"_"tenor"_"notional currency".

CDS Index Options

24. The qualitative criteria used to define the sub-classes for CDS Index options are the following:

- a. the underlying index;
- b. the tenor: calculated as the difference between the maturity date and the execution date. In particular, the tenor is denominated as “x years” where x is the number obtained by rounding up the ratio of days between maturity and execution date and 365 (e.g. 2.3) to the next whole number (3 years in this case). As a result, for the purpose of calculating the figures included in the table below a sub-class assigned with a tenor of “x years” includes all contracts with a maturity of more than “x-1 years” and less or equal to “x years” (e.g. 2 years < 3 year tenor \leq 3 years).
- c. the notional currency, i.e. the currency in which the contract is denominated;
- d. the on/off-the-run status: a trade was deemed to be executed on an on-the-run index if the execution date was in between the on-the-run-period for the index starting 5 days before the roll-over of the index, i.e. 5 days before its composition (e.g. version x of the index) was effective and ending 30 days after the next roll-over, i.e. the date on which the new composition of the index (e.g. version x+1 of the index) was effective. As a result, for 35 days versions “x” and “x+1” will be both on the run (refer to Chart 4: On-the-run index period - example).

However, it was not possible to disentangle tranching vs. untranching indices.

25. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity and on which the “Liquidity Flag” is based are indicated. Moreover, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered³⁷.

³⁷ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

CDS Index Options					Criteria applied for liquidity classification
Notional Amount per day					100,000,000
Num of trades per day					2.00
ESMA_KEY	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
Index_iTraxx_iTraxx Europe_6 years_Y_EUR	3,570	54.92	351,746,625,000	5,411,486,538	Liquid
Index_CD_X_CD_X.NA.IG_6 years_Y_USD	1,199	18.45	171,686,941,966	2,641,337,569	Liquid
Index_iTraxx_iTraxx Europe_5 years_Y_EUR	1,466	22.55	131,174,500,000	2,018,069,231	Liquid
Index_CD_X_CD_X.NA.IG_5 years_Y_USD	571	8.78	86,726,954,557	1,334,260,839	Liquid
Index_CD_X_CD_X.NA.HY_6 years_Y_USD	870	13.38	32,799,741,022	504,611,400	Liquid
Index_CD_X_CD_X.NA.HY_5 years_Y_USD	376	5.78	28,152,951,017	433,122,323	Liquid
Index_iTraxx_iTraxx Europe Crossover_6 years_Y_EUR	641	9.86	27,082,130,000	416,648,154	Liquid
Index_iTraxx_iTraxx Europe Crossover_5 years_Y_EUR	493	7.58	19,843,540,000	305,285,231	Liquid
Index_iTraxx_iTraxx Europe Senior Financials_6 years_Y_EUR	184	2.83	15,605,790,000	240,089,077	Liquid
Index_iTraxx_iTraxx Europe Senior Financials_5 years_Y_EUR	164	2.52	11,453,040,000	176,200,615	Liquid
Index_CD_X_CD_X.NA.IG_5 years_N_USD	68	1.05	7,877,405,257	121,190,850	Illiquid
Index_iTraxx_iTraxx Europe_5 years_N_EUR	260	4.00	6,303,300,000	96,973,846	Illiquid
Index_CD_X_CD_X.NA.HY_5 years_N_USD	35	0.54	2,179,113,999	33,524,831	Illiquid
Index_iTraxx_iTraxx Europe Crossover_5 years_N_EUR	125	1.92	2,152,980,000	33,122,769	Illiquid
Index_iTraxx_iTraxx Australia_6 years_Y_USD	21	0.32	858,675,538	13,210,393	Illiquid
Index_CD_X_CD_X.EM_6 years_Y_USD	12	0.18	797,755,990	12,273,169	Illiquid
Index_iTraxx_iTraxx Europe_11 years_Y_EUR	5	0.08	500,000,000	7,692,308	Illiquid
Index_iTraxx_iTraxx Europe Senior Financials_5 years_N_EUR	10	0.15	325,000,000	5,000,000	Illiquid
Index_iTraxx_iTraxx Europe_10 years_N_EUR	9	0.14	250,000,000	3,846,154	Illiquid
Index_iTraxx_iTraxx Europe Senior Financials_1 years_Y_EUR	2	0.03	250,000,000	3,846,154	Illiquid
Index_iTraxx_iTraxx Europe_1 years_Y_EUR	3	0.05	165,000,000	2,538,462	Illiquid
Index_iTraxx_iTraxx Japan_6 years_Y_JPY	6	0.09	66,696,574	1,026,101	Illiquid
Index_iTraxx_iTraxx Europe Senior Financials_5 years_Y_USD	1	0.02	59,831,699	920,488	Illiquid
Index_iTraxx_iTraxx Australia_5 years_Y_USD	3	0.05	50,766,290	781,020	Illiquid
Index_iTraxx_iTraxx Asia ex-Japan IG_6 years_Y_USD	2	0.03	36,261,636	557,871	Illiquid
Index_iTraxx_iTraxx Europe_4 years_Y_EUR	1	0.02	25,000,000	384,615	Illiquid
Index_iTraxx_iTraxx Europe Crossover_1 years_Y_EUR	3	0.05	13,500,000	207,692	Illiquid
Index_CD_X_CD_X.NA.IG_4 years_N_USD	1	0.02	7,252,327	111,574	Illiquid

Table 42: CDS Index options - liquidity assessment³⁸

³⁸ The ESMA KEY is composed as follows: Index_"Index family name"_"Index name"_"tenor"_"on-the run-flag"_"notional currency". The "on-the run flag" is "Y" if the index is on the run and "N" otherwise.

Proposal

26. As far as single name CDS are concerned ESMA presents 2 options:

- i. **Option A:** the classes of single name CDS included in Annex III, Section 7 of draft RTS 9 are liquid. ESMA is aware that this approach suffers from not being more granular as it considers single name CDS sub-classes liquid regardless of the specific underlying which is a result of the lack of granularity of TR data. Therefore, ESMA proposes a second option.
- ii. **Option B:** a single name CDS is considered to belong to a “single name CDS liquid class” only if besides being characterised by the combination of underlying issuer type, tenor, currency in which the notional amount of the contract is denominated as specified in each row of Table 62 in Annex III, Section 7 of draft RTS 9, the reference entity/obligation is included in a liquid CDS index as provided in Table 60 in Annex III, Section 7 of draft RTS 9. As a result, only those corporates and sovereign entities which are included in a liquid CDS index would be deemed to be liquid.

27. For all the other classes (CDS index, bespoke basket CDS, CDS index options and single name CDS options), ESMA is of the opinion that classes of financial instruments included in Annex III, Section 7 of draft RTS 9 are liquid.

Q3. Which is your preferred option for the definition of a liquid market of single name CDS? Please provide an answer detailed per underlying issuer type identified (sovereign and corporate), addressing the following points:

(1) Would you use different qualitative criteria to define the sub-classes?

(2) Would you use different parameters or the same parameters (i.e. average number of trades per day and average notional amount traded per day) but different thresholds in order to define a sub-class as liquid?

(3) Would you define classes declared as liquid in ESMA’s proposal as illiquid (or vice versa)? Please provide reasons for your answer.

Q4. For all the other classes (CDS Index, Bespoke basket CDS, CDS index options and Single name CDS options): do you agree with ESMA’s proposal for the definition of a liquid market? Please provide an answer detailed per contract type (CDS and CDS options), underlying type (index, single name, bespoke basket) and underlying identified, addressing the following points:

(1) Would you use different qualitative criteria to define the sub-classes?

- (2) Would you use different parameters or the same parameters (i.e. average number of trades per day and average notional amount traded per day) but different thresholds in order to define a sub-class as liquid?**

- (3) Would you define classes declared as liquid in ESMA's proposal as illiquid (or vice versa)? Please provide reasons for your answer.**

Pre-trade and Post-trade transparency requirements for non-equity instruments

[Sections 3.6 - Pre-trade transparency for non-equity instruments and 3.7 - Post-trade transparency requirements for non-equity instruments of the CP]

28. The tables below present the detailed results of the calculations to set the large in scale thresholds for credit derivatives which are provided in Annex III Section 7 of draft RTS 9. The following rules have been applied in the determination of such thresholds³⁹:

- i. The threshold for liquid sub-classes is determined as the greater of:
 - a. the threshold determined so that at least 90% of the trades would lie below the threshold and;
 - b. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
- ii. The threshold for illiquid classes and sub-classes is determined as the greater of:
 - a. the threshold determined so that at least 70% of the trades would lie below the threshold and;
 - b. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
- iii. The SSTI threshold is then set as 50% of the relevant LIS.

29. Furthermore, the following tables also include the results of the simulation of the calculation of the thresholds according to ESMA's preferred option⁴⁰. In other words, they present the results if the methodology providing for the annual recalculation of the LIS and SSTI thresholds, as summarised below, would have been applied:

- i. The LIS threshold would be determined as the greater of:
 - a. the threshold determined so that at least 90% of the trades would lie below the threshold (**criterion 1**);

³⁹ This is the methodology to set the thresholds under option 1 and for year 2017 under option 2 in the Consultation Paper of December 2014.

⁴⁰ Option 2 in the Consultation Paper of December 2014.

- b. the threshold determined so that at least 70% of the total volume traded for that sub-class would lie below the threshold (**criteria 2**) and;
 - c. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
 - ii. The SSTI threshold would be set as 50% of the relevant LIS.
- 30. More specifically for CDS Index, Single name CDS and CDS index options:
 - i. The first table - "LIS calculations on the basis of 10% of trades above LIS rule" - provides the following information:
 - a. for each sub-class the LIS is calculated so that at least 90% of the trades are below the LIS threshold;
 - b. the number of days on which at least one trade was recorded;
 - c. the number of trades above the LIS threshold;
 - d. the notional amount corresponding to the trades above the LIS threshold;
 - e. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - f. the rounded value of the LIS threshold;
 - g. for the "OTHERS" sub-class only, the LIS calculated so that at least 70% of the trades are below the LIS threshold;
 - ii. The second table - "LIS calculations on the basis of 30% notional amount above LIS rule" - provides for the following information:
 - a. for each sub-class the LIS calculated so that at least 70% of the notional amount is below the threshold;
 - b. the number of trades above the LIS threshold;
 - c. the notional amount corresponding to the trades above the LIS threshold;
 - d. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - e. the rounded value of the LIS threshold;

- iii. The third table - “Threshold selection” – provides the following information:
- a. for each sub-class the LIS is calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**);
 - b. for each sub-class the LIS calculated so that at least 70% of the notional amount is below the threshold (**criterion 2**);
 - c. the selected LIS threshold as the greater between the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2**⁴¹;
 - d. the rounded value of the selected LIS threshold;
 - e. the threshold for the sub-class applicable for **option 1**⁴² (pre-set LIS thresholds without annual recalculation) and for **option 2**⁴³ (annual recalculation of LIS thresholds from 2018 onwards) only **for 2017** as provided in Annex III, Section 7 of draft RTS 9.

31. Please be aware that for the calculations of the thresholds for:

- i. Single name CDS: only the records for which it was possible to calculate the tenor were considered;
- ii. CDS Index: only the records for which it was possible to calculate the tenor were considered. Furthermore, the sub-classes were defined using 3 of the 4 criteria considered, i.e. excluding the “on/off-the-run status” criterion. However, such fourth criterion is used in determining the liquid sub-classes. In other words, the threshold for the sub-class “iTraxx_iTraxx Europe_2 years_EUR” is €950 m if the iTraxx Europe index is on-the-run while if the index is off-the-run the threshold will be €100 m, which is the threshold for illiquid CDS Index sub-classes.

32. For single name CDS options and bespoke basket CDS instead, only one table is provided since the whole class was qualified as illiquid. In particular, the table - “LIS calculations” - provides the following information:

- a. the LIS threshold calculated so that at least 90% of the trades are below the LIS threshold;

⁴¹ According to option 2 in the Consultation Paper of December 2014 the selected threshold should also be greater than the LIS threshold floor, otherwise the latter would prevail.

⁴² Option 1 in the Consultation Paper of December 2014.

⁴³ Option 2 in the Consultation Paper of December 2014.

- b. the LIS threshold calculated so that at least 70% of the trades are below the LIS threshold;
 - c. the LIS threshold calculated so that at least 70% of the notional amount is below the threshold;
 - d. the number of days on which at least one trade was recorded;
 - e. the number of trades above the LIS threshold;
 - f. the notional amount corresponding to the trades above the LIS threshold;
 - g. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - h. the rounded value of the LIS threshold;
 - i. the threshold for the sub-class applicable for **option 1** and for **option 2** only for **2017** as provided in Annex III, Section 7 of draft RTS 9.
33. Last but not least, it is evident that for some sub-classes the LIS thresholds obtained according to criterion 1 and criterion 2 differ substantially. Furthermore, there are additional complications with the calculations when the number of trades is relatively small. ESMA is aware of these shortcomings and will undertake to fine-tune the methodology proposed in order to tackle these issues after having received feedback to the CP.

LIS calculations on the basis of 10% of trades above LIS rule

INDEX CDS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
iTraxx_iTraxx Europe_2 years_EUR	10%	15	939,507,448	7	12,114,314,822	10.29%	42.24%	950,000,000
iTraxx_iTraxx Europe_3 years_EUR	10%	25	905,258,999	18	33,218,698,006	9.84%	52.76%	900,000,000
iTraxx_iTraxx Europe_4 years_EUR	10%	37	1,362,210,067	44	150,048,949,909	9.91%	64.12%	1,350,000,000
iTraxx_iTraxx Europe_5 years_EUR	10%	61	240,000,000	658	903,655,572,985	10.00%	80.63%	250,000,000
iTraxx_iTraxx Europe_6 years_EUR	10%	48	100,000,000	886	339,532,255,852	10.01%	60.43%	100,000,000
iTraxx_iTraxx Europe_9 years_EUR	10%	16	382,000,000	8	4,819,790,900	9.88%	47.47%	375,000,000
iTraxx_iTraxx Europe_10 years_EUR	10%	36	185,000,000	64	25,287,425,501	9.94%	59.37%	175,000,000
iTraxx_iTraxx Europe_11 years_EUR	10%	38	340,000,000	34	25,272,800,400	10.15%	59.17%	350,000,000
CDX_CDX.NA.IG_3 years_USD	10%	13	1,647,651,703	2	3,542,864,061	8.33%	32.17%	1,650,000,000
CDX_CDX.NA.IG_4 years_USD	10%	37	845,421,910	9	12,990,335,068	10.23%	62.52%	850,000,000
CDX_CDX.NA.IG_5 years_USD	10%	53	290,093,087	97	107,425,155,617	10.05%	75.19%	300,000,000
CDX_CDX.NA.IG_6 years_USD	10%	52	329,980,887	71	59,132,261,142	9.96%	64.59%	325,000,000
iTraxx_iTraxx Europe Crossover_3 years_EUR	10%	18	244,475,000	15	14,464,263,636	10.20%	70.87%	250,000,000
iTraxx_iTraxx Europe Crossover_4 years_EUR	10%	30	451,268,463	27	22,973,985,238	9.93%	60.60%	450,000,000
iTraxx_iTraxx Europe Crossover_5 years_EUR	10%	60	52,000,000	550	223,873,738,557	10.01%	79.59%	50,000,000
iTraxx_iTraxx Europe Crossover_6 years_EUR	10%	48	36,910,000	582	122,918,375,588	10.00%	68.25%	25,000,000
iTraxx_iTraxx Europe Senior Financials_2 years_EUR	10%	10	514,511,100	12	6,822,801,851	10.26%	37.17%	525,000,000
iTraxx_iTraxx Europe Senior Financials_3 years_EUR	10%	11	503,623,089	18	14,463,359,597	9.94%	52.60%	500,000,000
iTraxx_iTraxx Europe Senior Financials_4 years_EUR	10%	13	476,487,748	27	17,439,942,492	10.11%	50.10%	475,000,000
iTraxx_iTraxx Europe Senior Financials_5 years_EUR	10%	36	434,325,000	61	60,918,192,496	10.05%	62.29%	425,000,000
iTraxx_iTraxx Europe Senior Financials_6 years_EUR	10%	48	97,100,000	155	35,958,390,984	9.99%	48.04%	100,000,000
CDX_CDX.NA.HY_4 years_USD	10%	27	387,300,017	8	5,112,114,879	10.39%	55.28%	375,000,000

LIS calculations on the basis of 10% of trades above LIS rule								
INDEX CDS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CDX_CD.X.NA.HY_5 years_USD	10%	50	101,532,580	69	17,406,980,026	10.00%	65.47%	100,000,000
CDX_CD.X.NA.HY_6 years_USD	10%	43	208,698,043	30	11,778,651,357	9.97%	63.83%	200,000,000
CDX_CD.X.EM_5 years_USD	10%	35	51,764,212	36	7,423,901,855	9.92%	76.74%	50,000,000
CDX_CD.X.EM_6 years_USD	10%	47	22,119,598	52	13,703,450,610	10.08%	87.05%	25,000,000
OTHERS	10%	48	225,547,375	54	27,495,174,545	10.09%	50.89%	225,000,000
OTHERS	30%	48	94,390,285	161	44,024,794,956	30.09%	81.49%	100,000,000

Table 43: CDS Index - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
INDEX CDS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
iTraxx_iTraxx Europe_2 years_EUR	30%	1,018,502,592	3	9,174,807,374	4.41%	31.99%	1,025,000,000
iTraxx_iTraxx Europe_3 years_EUR	30%	1,601,839,000	5	19,805,753,748	2.73%	31.46%	1,600,000,000
iTraxx_iTraxx Europe_4 years_EUR	30%	4,531,687,586	8	72,116,762,254	1.80%	30.82%	4,525,000,000
iTraxx_iTraxx Europe_5 years_EUR	30%	3,358,669,400	60	337,833,523,366	0.91%	30.14%	3,350,000,000
iTraxx_iTraxx Europe_6 years_EUR	30%	825,000,000	93	169,089,704,326	1.05%	30.10%	825,000,000
iTraxx_iTraxx Europe_9 years_EUR	30%	514,242,100	4	3,556,968,400	4.94%	35.03%	525,000,000
iTraxx_iTraxx Europe_10 years_EUR	30%	447,052,418	18	12,827,509,672	2.80%	30.12%	450,000,000
iTraxx_iTraxx Europe_11 years_EUR	30%	823,000,000	9	13,619,150,100	2.69%	31.89%	825,000,000
CDX_CD.X.NA.IG_3 years_USD	30%	1,647,651,703	1	3,542,864,061	4.17%	32.17%	1,650,000,000
CDX_CD.X.NA.IG_4 years_USD	30%	1,769,567,831	2	6,966,264,778	2.27%	33.53%	1,775,000,000
CDX_CD.X.NA.IG_5 years_USD	30%	2,097,113,387	13	44,633,622,782	1.35%	31.24%	2,100,000,000
CDX_CD.X.NA.IG_6 years_USD	30%	1,210,413,406	16	28,117,475,534	2.24%	30.71%	1,200,000,000
iTraxx_iTraxx Europe Crossover_3 years_EUR	30%	1,143,250,000	2	6,128,844,429	1.36%	30.03%	1,150,000,000
iTraxx_iTraxx Europe Crossover_4 years_EUR	30%	1,000,000,000	9	12,286,282,296	3.31%	32.41%	1,000,000,000
iTraxx_iTraxx Europe Crossover_5 years_EUR	30%	1,229,926,000	49	84,649,248,501	0.89%	30.10%	1,225,000,000
iTraxx_iTraxx Europe Crossover_6 years_EUR	30%	810,000,000	33	54,390,740,000	0.57%	30.20%	800,000,000
iTraxx_iTraxx Europe Senior Financials_2 years_EUR	30%	533,667,600	9	5,790,776,200	7.69%	31.54%	525,000,000
iTraxx_iTraxx Europe Senior Financials_3 years_EUR	30%	826,086,915	8	8,753,949,874	4.42%	31.84%	825,000,000
iTraxx_iTraxx Europe Senior Financials_4 years_EUR	30%	602,026,975	13	10,633,995,563	4.87%	30.55%	600,000,000
iTraxx_iTraxx Europe Senior Financials_5 years_EUR	30%	1,326,650,000	15	29,893,304,056	2.47%	30.57%	1,325,000,000
iTraxx_iTraxx Europe Senior Financials_6 years_EUR	30%	221,419,300	52	22,560,173,500	3.35%	30.14%	225,000,000
CDX_CD.X.NA.HY_4 years_USD	30%	636,189,805	3	3,068,671,905	3.90%	33.19%	625,000,000

LIS calculations on the basis of 30% of notional amount above LIS rule							
INDEX CDS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CDX_CD.X.NA.HY_5 years_USD	30%	362,144,958	16	8,320,731,823	2.32%	31.30%	350,000,000
CDX_CD.X.NA.HY_6 years_USD	30%	449,644,285	9	5,636,049,175	2.99%	30.54%	450,000,000
CDX_CD.X.EM_5 years_USD	30%	416,135,633	6	3,145,963,074	1.65%	32.52%	425,000,000
CDX_CD.X.EM_6 years_USD	30%	1,211,821,083	3	5,047,376,038	0.58%	32.06%	1,200,000,000
OTHERS	30%	533,046,048	19	16,223,059,743	3.55%	30.03%	525,000,000

Table 44: CDS Index - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
INDEX CDS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
iTraxx_iTraxx Europe_2 years_EUR	939,507,448	1,018,502,592	1,018,502,592	1,025,000,000	950,000,000
iTraxx_iTraxx Europe_3 years_EUR	905,258,999	1,601,839,000	1,601,839,000	1,600,000,000	900,000,000
iTraxx_iTraxx Europe_4 years_EUR	1,362,210,067	4,531,687,586	4,531,687,586	4,525,000,000	1,350,000,000
iTraxx_iTraxx Europe_5 years_EUR	240,000,000	3,358,669,400	3,358,669,400	3,350,000,000	250,000,000
iTraxx_iTraxx Europe_6 years_EUR	100,000,000	825,000,000	825,000,000	825,000,000	100,000,000
iTraxx_iTraxx Europe_9 years_EUR	382,000,000	514,242,100	514,242,100	525,000,000	375,000,000
iTraxx_iTraxx Europe_10 years_EUR	185,000,000	447,052,418	447,052,418	450,000,000	175,000,000
iTraxx_iTraxx Europe_11 years_EUR	340,000,000	823,000,000	823,000,000	825,000,000	350,000,000
CDX_CD.X.NA.IG_3 years_USD	1,647,651,703	1,647,651,703	1,647,651,703	1,650,000,000	1,650,000,000
CDX_CD.X.NA.IG_4 years_USD	845,421,910	1,769,567,831	1,769,567,831	1,775,000,000	850,000,000
CDX_CD.X.NA.IG_5 years_USD	290,093,087	2,097,113,387	2,097,113,387	2,100,000,000	300,000,000
CDX_CD.X.NA.IG_6 years_USD	329,980,887	1,210,413,406	1,210,413,406	1,200,000,000	325,000,000
iTraxx_iTraxx Europe Crossover_3 years_EUR	244,475,000	1,143,250,000	1,143,250,000	1,150,000,000	250,000,000
iTraxx_iTraxx Europe Crossover_4 years_EUR	451,268,463	1,000,000,000	1,000,000,000	1,000,000,000	450,000,000
iTraxx_iTraxx Europe Crossover_5 years_EUR	52,000,000	1,229,926,000	1,229,926,000	1,225,000,000	50,000,000
iTraxx_iTraxx Europe Crossover_6 years_EUR	36,910,000	810,000,000	810,000,000	800,000,000	25,000,000
iTraxx_iTraxx Europe Senior Financials_2 years_EUR	514,511,100	533,667,600	533,667,600	525,000,000	525,000,000
iTraxx_iTraxx Europe Senior Financials_3 years_EUR	503,623,089	826,086,915	826,086,915	825,000,000	500,000,000
iTraxx_iTraxx Europe Senior Financials_4 years_EUR	476,487,748	602,026,975	602,026,975	600,000,000	475,000,000
iTraxx_iTraxx Europe Senior Financials_5 years_EUR	434,325,000	1,326,650,000	1,326,650,000	1,325,000,000	425,000,000
iTraxx_iTraxx Europe Senior Financials_6 years_EUR	97,100,000	221,419,300	221,419,300	225,000,000	100,000,000
CDX_CD.X.NA.HY_4 years_USD	387,300,017	636,189,805	636,189,805	625,000,000	375,000,000

Threshold selection					
INDEX CDS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
CDX_CD.X.NA.HY_5 years_USD	101,532,580	362,144,958	362,144,958	350,000,000	100,000,000
CDX_CD.X.NA.HY_6 years_USD	208,698,043	449,644,285	449,644,285	450,000,000	200,000,000
CDX_CD.X.EM_5 years_USD	51,764,212	416,135,633	416,135,633	425,000,000	50,000,000
CDX_CD.X.EM_6 years_USD	22,119,598	1,211,821,083	1,211,821,083	1,200,000,000	25,000,000
OTHERS	225,547,375	533,046,048	533,046,048	525,000,000	100,000,000

Table 45: CDS Index - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule								
SINGLE NAME CDS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
Corporate_1 year_USD	10%	53	25,455,668	165	7,659,421,172	9.98%	40.51%	25,000,000
Corporate_2 years_USD	10%	55	18,130,818	200	7,205,187,778	10.02%	45.77%	20,000,000
Corporate_3 years_USD	10%	58	22,119,598	267	10,933,554,582	10.00%	46.77%	20,000,000
Corporate_4 years_USD	10%	61	20,161,470	426	15,086,283,467	10.00%	45.06%	20,000,000
Corporate_5 years_USD	10%	60	21,158,665	522	18,076,101,582	10.00%	40.78%	20,000,000
Corporate_6 years_USD	10%	63	16,680,353	410	12,042,162,920	10.00%	40.44%	15,000,000
Corporate_1 year_EUR	10%	57	22,822,312	1,140	43,593,359,104	10.00%	41.22%	25,000,000
Corporate_2 years_EUR	10%	59	21,298,338	1,362	50,021,012,788	10.00%	41.22%	20,000,000
Corporate_3 years_EUR	10%	60	20,607,553	1,614	55,886,946,768	10.00%	40.23%	20,000,000
Corporate_4 years_EUR	10%	60	19,810,584	1,790	59,108,987,737	10.00%	41.05%	20,000,000
Corporate_5 years_EUR	10%	60	21,200,000	2,270	80,793,288,538	10.00%	41.50%	20,000,000
Corporate_6 years_EUR	10%	61	15,310,000	1,317	36,778,480,086	10.00%	39.51%	15,000,000
Sovereign_1 year_USD	10%	28	72,523,272	46	5,446,187,838	9.98%	45.02%	75,000,000
Sovereign_2 years_USD	10%	30	74,626,447	54	7,599,272,347	10.04%	47.87%	75,000,000
Sovereign_3 years_USD	10%	34	70,219,042	61	7,916,763,399	9.97%	48.66%	70,000,000
Sovereign_4 years_USD	10%	31	69,709,369	62	9,366,546,882	9.94%	49.28%	70,000,000
Sovereign_5 years_USD	10%	33	86,092,521	101	22,343,067,979	10.00%	63.61%	85,000,000
Sovereign_6 years_USD	10%	63	36,261,636	152	16,530,760,189	10.03%	59.43%	35,000,000
OTHERS	10%	63	10,862,739	386	11,562,369,907	9.99%	51.52%	10,000,000
OTHERS	30%	63	5,000,000	1,159	16,920,337,189	30.01%	75.39%	5,000,000

Table 46: Single name CDS - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
SINGLE NAME CDS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
Corporate_1 year_USD	30%	35,536,403	99	5,700,869,298	5.99%	30.15%	35,000,000
Corporate_2 years_USD	30%	29,009,309	89	4,732,677,982	4.46%	30.06%	30,000,000
Corporate_3 years_USD	30%	36,103,898	128	7,031,440,852	4.80%	30.08%	35,000,000
Corporate_4 years_USD	30%	28,646,692	218	10,067,625,245	5.12%	30.07%	30,000,000
Corporate_5 years_USD	30%	26,470,994	319	13,315,344,101	6.11%	30.04%	25,000,000
Corporate_6 years_USD	30%	21,394,365	242	8,953,515,957	5.90%	30.07%	20,000,000
Corporate_1 year_EUR	30%	30,067,900	682	31,743,118,107	5.98%	30.01%	30,000,000
Corporate_2 years_EUR	30%	27,733,928	802	36,431,579,211	5.89%	30.02%	30,000,000
Corporate_3 years_EUR	30%	26,704,500	1,008	41,692,765,394	6.25%	30.01%	25,000,000
Corporate_4 years_EUR	30%	25,000,000	1,074	43,213,396,997	6.00%	30.01%	25,000,000
Corporate_5 years_EUR	30%	28,031,200	1,350	58,415,885,317	5.95%	30.01%	30,000,000
Corporate_6 years_EUR	30%	20,300,000	829	27,943,349,471	6.29%	30.02%	20,000,000
Sovereign_1 year_USD	30%	103,853,325	25	3,676,808,800	5.42%	30.40%	105,000,000
Sovereign_2 years_USD	30%	124,756,273	24	4,794,874,441	4.46%	30.20%	125,000,000
Sovereign_3 years_USD	30%	124,981,367	29	5,003,734,059	4.74%	30.75%	125,000,000
Sovereign_4 years_USD	30%	145,101,734	24	5,764,318,489	3.85%	30.32%	145,000,000
Sovereign_5 years_USD	30%	290,120,413	24	10,626,178,410	2.38%	30.25%	290,000,000
Sovereign_6 years_USD	30%	145,046,544	33	8,445,762,730	2.18%	30.36%	145,000,000
OTHERS	30%	28,936,785	95	6,739,211,952	2.46%	30.03%	30,000,000

Table 47: Single name CDS - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
SINGLE NAME CDS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
Corporate_1 year_USD	25,455,668	35,536,403	35,536,403	35,000,000	25,000,000
Corporate_2 years_USD	18,130,818	29,009,309	29,009,309	30,000,000	20,000,000
Corporate_3 years_USD	22,119,598	36,103,898	36,103,898	35,000,000	20,000,000
Corporate_4 years_USD	20,161,470	28,646,692	28,646,692	30,000,000	20,000,000
Corporate_5 years_USD	21,158,665	26,470,994	26,470,994	25,000,000	20,000,000
Corporate_6 years_USD	16,680,353	21,394,365	21,394,365	20,000,000	15,000,000
Corporate_1 year_EUR	22,822,312	30,067,900	30,067,900	30,000,000	25,000,000
Corporate_2 years_EUR	21,298,338	27,733,928	27,733,928	30,000,000	20,000,000
Corporate_3 years_EUR	20,607,553	26,704,500	26,704,500	25,000,000	20,000,000
Corporate_4 years_EUR	19,810,584	25,000,000	25,000,000	25,000,000	20,000,000
Corporate_5 years_EUR	21,200,000	28,031,200	28,031,200	30,000,000	20,000,000
Corporate_6 years_EUR	15,310,000	20,300,000	20,300,000	20,000,000	15,000,000
Sovereign_1 year_USD	72,523,272	103,853,325	103,853,325	105,000,000	75,000,000
Sovereign_2 years_USD	74,626,447	124,756,273	124,756,273	125,000,000	75,000,000
Sovereign_3 years_USD	70,219,042	124,981,367	124,981,367	125,000,000	70,000,000
Sovereign_4 years_USD	69,709,369	145,101,734	145,101,734	145,000,000	70,000,000
Sovereign_5 years_USD	86,092,521	290,120,413	290,120,413	290,000,000	85,000,000
Sovereign_6 years_USD	36,261,636	145,046,544	145,046,544	145,000,000	35,000,000
OTHERS	10,862,739	28,936,785	28,936,785	30,000,000	10,000,000

Table 48: Single name CDS - Threshold selection

LIS calculations									
BESPOKE BASKET CDS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value as in Annex III of draft RTS 9
OTHERS	10%	69	108,784,908	93	45,182,382,073	9.96%	85.80%	110,000,000	
OTHERS	30%	69	10,443,351	280	50,804,596,956	29.98%	96.48%	10,000,000	10,000,000
OTHERS	30%	69	1,213,501,259	8	16,862,873,110	0.86%	32.02%	1,215,000,000	

Table 49: Bespoke basket CDS - LIS calculations

LIS calculations on the basis of 10% of trades above LIS rule								
CDS INDEX OPTIONS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
Index_CD_X_CD_X.NA.HY_5 years_Y_USD	10%	30	181,308,179	38	13,452,188,559	10.11%	47.78%	175,000,000
Index_CD_X_CD_X.NA.HY_6 years_Y_USD	10%	45	108,784,908	87	17,459,530,212	10.00%	53.23%	100,000,000
Index_CD_X_CD_X.NA.IG_5 years_Y_USD	10%	31	362,616,359	57	32,353,139,203	9.98%	37.30%	375,000,000
Index_CD_X_CD_X.NA.IG_6 years_Y_USD	10%	50	362,616,359	120	79,362,951,210	10.01%	46.23%	375,000,000
Index_iTraxx_iTraxx Europe Crossover_5 years_Y_EUR	10%	28	100,000,000	49	5,975,000,000	9.94%	30.11%	100,000,000
Index_iTraxx_iTraxx Europe Crossover_6 years_Y_EUR	10%	49	100,000,000	64	10,217,360,000	9.98%	37.73%	100,000,000
Index_iTraxx_iTraxx Europe Senior Financials_5 years_Y_EUR	10%	30	200,000,000	16	3,800,000,000	9.76%	33.18%	200,000,000
Index_iTraxx_iTraxx Europe Senior Financials_6 years_Y_EUR	10%	38	200,000,000	18	5,730,000,000	9.78%	36.72%	200,000,000
Index_iTraxx_iTraxx Europe 5 years_Y_EUR	10%	33	250,000,000	147	77,501,700,000	10.03%	59.08%	250,000,000
Index_iTraxx_iTraxx Europe 6 years_Y_EUR	10%	48	250,000,000	357	223,425,130,000	10.00%	63.52%	250,000,000
OTHERS	10%	47	100,000,000	57	13,875,911,009	10.05%	63.31%	100,000,000
OTHERS	30%	47	25,000,000	170	19,812,298,588	29.98%	90.39%	25,000,000

Table 50: CDS index options - LIS calculations on the basis of 10% of trades above the LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
CDS INDEX OPTIONS	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
Index_CD_X_CD_X.NA.HY_5 years_Y_USD	30%	362,616,359	17	8,702,792,613	4.52%	30.91%	375,000,000
Index_CD_X_CD_X.NA.HY_6 years_Y_USD	30%	181,308,179	34	9,956,078,152	3.91%	30.35%	175,000,000
Index_CD_X_CD_X.NA.IG_5 years_Y_USD	30%	362,616,359	39	26,188,661,102	6.83%	30.20%	375,000,000
Index_CD_X_CD_X.NA.IG_6 years_Y_USD	30%	725,232,718	56	51,661,710,907	4.67%	30.09%	725,000,000
Index_iTraxx_iTraxx Europe Crossover_5 years_Y_EUR	30%	100,000,000	48	5,975,000,000	9.74%	30.11%	100,000,000
Index_iTraxx_iTraxx Europe Crossover_6 years_Y_EUR	30%	100,000,000	43	8,217,360,000	6.71%	30.34%	100,000,000
Index_iTraxx_iTraxx Europe Senior Financials_5 years_Y_EUR	30%	200,000,000	14	3,600,000,000	8.54%	31.43%	200,000,000
Index_iTraxx_iTraxx Europe Senior Financials_6 years_Y_EUR	30%	200,000,000	12	4,730,000,000	6.52%	30.31%	200,000,000
Index_iTraxx_iTraxx Europe_5 years_Y_EUR	30%	500,000,000	42	39,700,000,000	2.86%	30.27%	500,000,000
Index_iTraxx_iTraxx Europe_6 years_Y_EUR	30%	750,000,000	59	105,599,900,000	1.65%	30.02%	750,000,000
OTHERS	30%	250,000,000	11	6,754,105,753	1.94%	30.81%	250,000,000

Table 51: CDS index options - LIS calculations on the basis of 30% of notional amount above the LIS rule

Threshold selection					
CDS INDEX OPTIONS	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
Index_CD_X_CD_X.NA.HY_5 years_Y_USD	181,308,179	362,616,359	362,616,359	375,000,000	175,000,000
Index_CD_X_CD_X.NA.HY_6 years_Y_USD	108,784,908	181,308,179	181,308,179	175,000,000	100,000,000
Index_CD_X_CD_X.NA.IG_5 years_Y_USD	362,616,359	362,616,359	362,616,359	375,000,000	375,000,000
Index_CD_X_CD_X.NA.IG_6 years_Y_USD	362,616,359	725,232,718	725,232,718	725,000,000	375,000,000
Index_iTraxx_iTraxx Europe Crossover_5 years_Y_EUR	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000
Index_iTraxx_iTraxx Europe Crossover_6 years_Y_EUR	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000
Index_iTraxx_iTraxx Europe Senior Financials_5 years_Y_EUR	200,000,000	200,000,000	200,000,000	200,000,000	200,000,000
Index_iTraxx_iTraxx Europe Senior Financials_6 years_Y_EUR	200,000,000	200,000,000	200,000,000	200,000,000	200,000,000
Index_iTraxx_iTraxx Europe_5 years_Y_EUR	250,000,000	500,000,000	500,000,000	500,000,000	250,000,000
Index_iTraxx_iTraxx Europe_6 years_Y_EUR	250,000,000	750,000,000	750,000,000	750,000,000	250,000,000
OTHERS	100,000,000	250,000,000	250,000,000	250,000,000	25,000,000

Table 52: CDS index options - Threshold selection

LIS calculations									
SINGLE NAME CDS OPTIONS	%	Num of days traded	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value as in Annex III of draft RTS 9
OTHERS	10%	11	7,804,918	3	36,421,860	11.11%	32.72%	10,000,000	
OTHERS	30%	11	4,257,228	8	67,245,888	29.63%	60.41%	5,000,000	10,000,000
OTHERS	30%	11	7,804,918	2	36,421,860	7.41%	32.72%	10,000,000	

Table 53: Single name CDS options - LIS calculations

Proposal

34. The large in scale and size specific to the instrument thresholds that ESMA proposes for credit derivatives for **option 1**⁴⁴ (pre-set LIS thresholds without annual recalculation) and **for option 2**⁴⁵ (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017** are provided in Section 7 of Annex III of draft RTS 9.

Q5. Do you agree with ESMA's proposal for credit derivatives? Please specify, for each sub-class (single name CDS, CDS index, bespoke basket CDS, single name CDS options, CDS index options) if you agree on the following points providing reasons for your answer and, if you disagree providing ESMA with your alternative proposal:

(1) deferral period set to 48 hours

(2) size specific to the instrument threshold set as 50% of the large in scale threshold

(3) volume measure used to set the large in scale and size specific to the instrument threshold as specified in Annex II, Table 3 of draft RTS 9

(4) pre-trade and post-trade thresholds set at the same size

(5) large in scale thresholds: (a) state your preference for the system to set the thresholds (i.e. annual recalculation of the thresholds vs. no recalculation of the thresholds) (b) in the case of a preference for a system with no recalculation (i.e. option 1), provide feedback on the thresholds determined. In the case of a preference for a system with recalculation (i.e. option 2), provide feedback on the thresholds determined for 2017 and on the methodology to recalculate the thresholds from 2018 onwards including the level of granularity of the classes on which the recalculations will be performed.

⁴⁴ Option 1 in the Consultation Paper of December 2014.

⁴⁵ Option 2 in the Consultation Paper of December 2014.

Annex 2.2.1: Details on the cleansing of TRs data for credit derivatives

35. The analysis based on TRs data, which focused on the assessment of the liquidity of OTC traded interest rate derivatives, required an extensive cleansing and screening phase. In particular, the following steps were undertaken:

- i. selection of records based on the date of execution of the trade; only trades executed in the period 1 March – 31 May 2014 were retained;
- ii. selection of records based on the venue of execution in order to disentangle only OTC trades, i.e. those flagged as XOFF, XXXX⁴⁶;
- iii. in general, only records whose action type was flagged as “N=new” “M=modify” or empty were considered for the analysis;
- iv. selection of unique trade ID records per TR and across all TRs, in other words only one record per trade ID was included in the final dataset;
- v. records flagged as contract resulting from a compression exercise or intragroup transactions as defined in Article 3 of Regulation (EU) No 648/2012 or compressions were excluded;
- vi. identification of credit derivatives. Although some TRs provide data per asset class, for other TRs the selection was carried out by means of field 2 of Table 2 included in the delegated regulation (EU) No 148/2013, i.e. “Product ID 1” equal to “CR”. Further screening for contract types (i.e. futures, options, swaps, etc.) was possible by means of field 3 of Table 2 (“Product ID 2”). However, the screening of the different types of underlying (single name, index, basket), the identification of the underlying name and its classification (sovereign vs. corporate for single name and on-the-run vs. off-the-run for indices) was possible only through the analysis of the information/codes provided for the underlying (field 4 of Table 2 included in the delegated regulation (EU) No 148/2013, i.e. “Underlying”).
- vii. all records for which a classification was not possible because of missing or incoherent information provided in the report were excluded;
- viii. extreme values of notional amount were excluded from the calculations;

⁴⁶ Those records with an empty field were considered to be OTC trades

- ix. all values were converted into Euro on the basis of the simple average of the ECB foreign exchange reference rates over the three-month period considered⁴⁷.
36. ESMA is fully aware of quality issues related to the data reported to TRs, especially in the first months after the start of TR reporting. ESMA already put into practice in October 2014 a data quality plan to address those issues. They are mainly due to the absence of a commonly-agreed trade identifier, the incorrect or inconsistent reporting of some data fields or the difficulty that some counterparties faced in obtaining the LEI on time for the go-live of the trade repository system on 12 February 2014. Indeed, a wider use of a unique trade identifier and of the LEI would have facilitated reconciliation of the reports per and across TRs and ESMA's analysis. Furthermore, data quality issues are further exacerbated by the heterogeneous interpretation of the requirements provided by the Regulation in terms of product classification during the initial implementation period of the reporting system, which corresponds to the period available for a comprehensive analysis of the non-equity universe. However, ESMA considers that the quality of TRs' data is, all in all, sufficient to provide a general overview of the OTC trading activity of a class of derivatives over a certain period.

⁴⁷ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

2.3. Other derivatives

Liquid market definition

[Section 3.5 of the CP - Liquid market definition for non-equity financial instruments]

- ESMA undertook an analysis of the residual classes of derivatives based on trade repositories (TRs) data collected over the period 1 March 2014 – 31 May 2014 and including contracts executed both on-venue and off-venue. The contract types summarised in the following table were identified after an extensive cleaning and screening phase (for further details refer to Annex 2.3.1).

Underlying type Contract type	Freights	Emissions	Other Exotic	Weather
Futures	x	x	x	
Options	x	x		
Forwards	x	x	x	
Swaps	x	x	x	x
Others	x	x	x	

Table 55: Other derivatives - underlying type and contract type⁴⁸

- The following chart and table present the distribution of notional amount recorded over the three-month period among the different underlying types identified and per contract type.

⁴⁸ Other exotic derivatives comprise financial instruments as defined in Section C(10) of Annex I different from freight derivatives or weather derivatives.

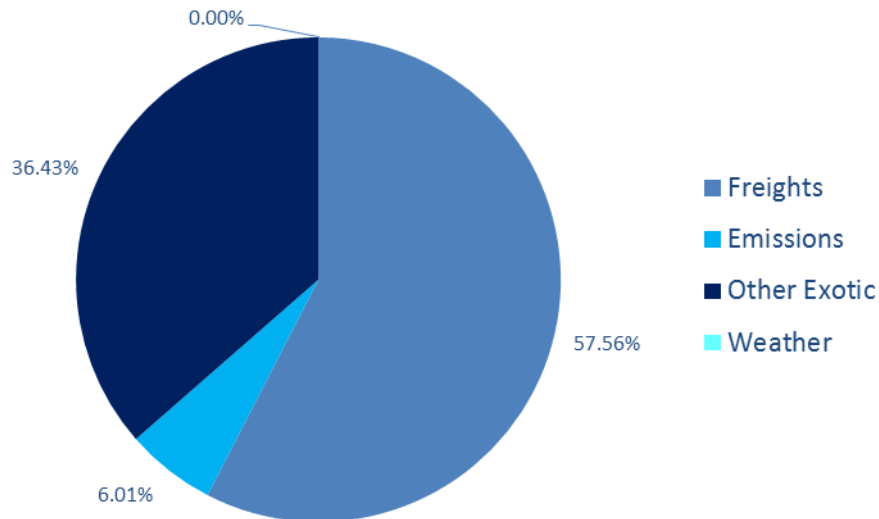


Chart 5: Other derivatives – notional amount distribution

Notional Amount (%)		Freights	Emissions	Other Exotic	Weather
Futures	FU	92.71%	95.03%	3.82%	-
Options	OP	6.66%	0.53%	-	-
Forwards	FW	0.28%	0.91%	68.38%	-
Swaps	SW	0.30%	0.64%	2.11%	100.00%
Others	OT	0.06%	2.89%	25.69%	-
Total		100%	100%	100%	100%

Table 56: Other derivatives - notional amount distribution per underlying and contract type

3. From the above chart it is evident that a large share is represented by freights and other exotic derivatives.
4. Additional statistics on the data sample collected are presented in the following set of charts per combination of:
 - i. underlying type (freights, emissions, and other exotic) and;
 - i. venue of execution:

- a. OTC indicates that the contract was executed off-venue;
- b. ETD indicates that the contract was executed on-venue.

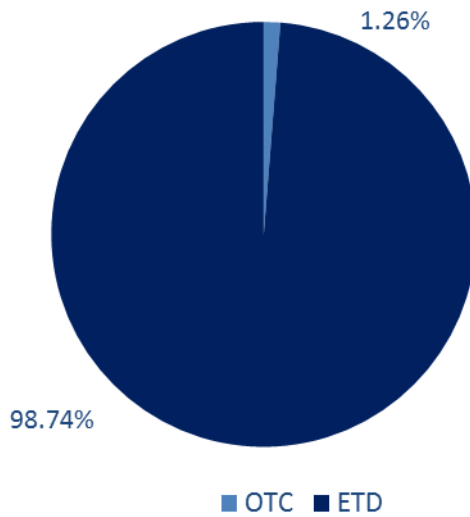


Chart 6: Freight derivatives – notional amount distribution

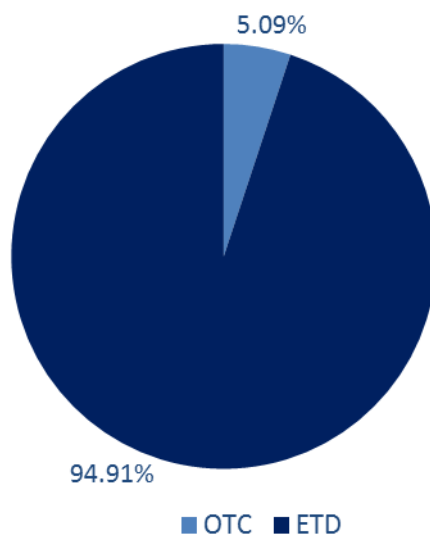


Chart 7: Emissions derivatives – notional amount distribution

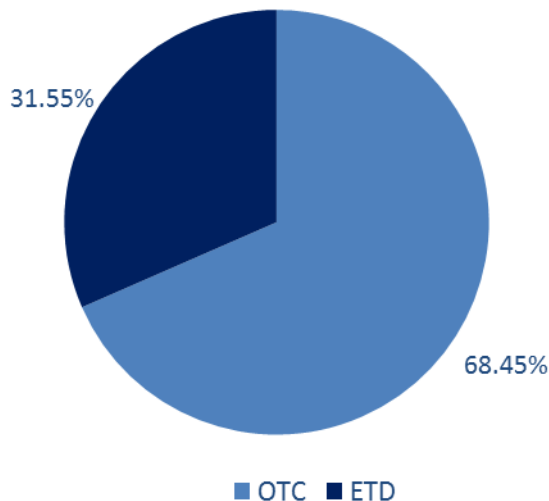


Chart 8: Other exotic derivatives – notional amount distribution

5. Finally, as far as weather derivatives are concerned, 100% of the notional amount traded during the period is related to contracts executed OTC.
6. As the tables below indicate, the data sample was analysed per contract types identified irrespectively of the type of underlying and viceversa. In both cases, the liquidity of the classes was assessed on the basis of the following criteria:
 - i. average notional amount per day⁴⁹ greater or equal to €500 m ('notional amount per day' in the following tables);
 - ii. number of days traded greater or equal to 80% of the available trading days in the period⁵⁰;
 - iii. average number of trades per day⁵¹ greater or equal to 100 ('number of trades per day in the following tables).
7. In all cases, none of the classes qualifies as liquid as presented in the tables below. In particular, in each table, besides the classification of the class as either liquid or illiquid

⁴⁹ Calculated as total notional amount traded divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁵⁰ Calculated as the number of different days on which a trade was recorded divided by the number of trading days over the period, considered to be 65. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

⁵¹ Calculated as total number of trades divided by the number of trading days over the period, considered to be 65.

on the basis of the criteria described above, statistics on the number of trades, notional amount recorded and days traded over the period are included.

Underlying type	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Freights	163,517	88.86%	2,516	24,793,569,490	57.56%	381,439,531	67	103%	ILLIQUID
Emissions	15,199	8.26%	234	2,586,694,770	6.01%	39,795,304	64	98%	ILLIQUID
Other Exotic	5,289	2.87%	81	15,691,042,568	36.43%	241,400,655	73	112%	ILLIQUID
Weather	2	0.00%	0.03	10,900	0.00%	168	2	3%	ILLIQUID
Total	184,007	100%	2,831	43,071,317,728	100%	662,635,657			

Table 57: Other derivatives - liquidity assessment per underlying type⁵²

Contract type	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
FU Futures	168,419	91.53%	2,591.06	26,044,836,190	60.47%	400,689,788	71	109%	ILLIQUID
OP Options	10,168	5.53%	156.43	1,663,826,989	3.86%	25,597,338	58	89%	ILLIQUID
FW Forwards	3,112	1.69%	47.88	10,821,709,393	25.13%	166,487,837	68	105%	ILLIQUID
SW Swaps	912	0.50%	14.03	421,696,187	0.98%	6,487,634	61	94%	ILLIQUID
OT Others	1,396	0.76%	21.48	4,119,248,969	9.56%	63,373,061	57	88%	ILLIQUID
Total	184,007	100%	2,831	43,071,317,728	100%	662,635,657			

Table 58: Other derivatives - liquidity assessment per contract type⁵³

⁵² 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

⁵³ 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

Proposal

8. ESMA is of the opinion that the following classes of financial instruments are not liquid:

- i. freight derivatives;
- ii. emissions derivatives;
- iii. weather derivatives;
- iv. other exotic derivatives.

Q6. Do you agree with ESMA's proposal for the definition of a liquid market? Please provide an answer detailed per class of derivatives (freight derivatives, emissions derivatives, weather derivatives and other exotic derivatives) and contract type identified (options, futures, forwards, swaps, others). If you do not agree with ESMA's proposal for the definition of a liquid market, please specify per class of derivatives and contract type identified:

(1) your alternative proposal;

(2) which qualitative criteria would you use to define the sub-classes;

(3) which parameters and related threshold values would you use in order to define a sub-class as liquid. Please, provide reasons for your answer.

Pre-trade and Post-trade transparency requirements for non-equity instruments

[Sections 3.6 - Pre-trade transparency for non-equity instruments and 3.7 - Post-trade transparency requirements for non-equity instruments of the CP]

Alternative A

9. The tables below present the detailed results of the calculations to set the large in scale thresholds for the class of other derivatives which are provided in Annex III Section 8 of draft RTS 9. ESMA considers as a first alternative (**alternative A**) to divide the whole class of other derivatives into 4 sub-classes on the basis of the underlying type. In particular, for the calculation of the thresholds, the following rules have been applied:
 - i. The threshold has been determined as the greater of:
 - a. the threshold determined so that at least 70% of the trades would lie below the threshold and;
 - b. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9⁵⁴.
 - ii. The SSTI threshold is then set as 50% of the relevant LIS.
10. Furthermore, the following tables also include the results of the simulation of the calculation of the thresholds according to ESMA's preferred option⁵⁵. In other words, they present the results if the methodology providing for the annual recalculation of the LIS and SSTI thresholds, as summarised below, would have been applied:
 - i. The LIS threshold would be determined as the greater of:
 - a. the threshold determined so that at least 90% of the trades would lie below the threshold (**criterion 1**);
 - b. the threshold determined so that at least 70% of the total volume traded for that sub-class would lie below the threshold (**criterion 2**) and;
 - c. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.

⁵⁴ This is the methodology to set the thresholds under option 1 and for year 2017 under option 2 in the Consultation Paper of December 2014.

⁵⁵ Option 2 in the Consultation Paper of December 2014.

- ii. The SSTI threshold would be set as 50% of the relevant LIS.
11. More specifically for each sub-class one table - "LIS calculations" - including the following information is provided:
- i. the LIS threshold calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**);
 - ii. the LIS threshold calculated so that at least 70% of the trades are below the LIS threshold;
 - iii. the LIS threshold calculated so that at least 70% of the notional amount is below the threshold (**criterion 2**);
 - iv. the number of trades above the LIS threshold;
 - v. the notional amount corresponding to the trades above the LIS threshold;
 - vi. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - vii. the rounded value of the LIS threshold;
 - viii. the selected LIS threshold as the greater between the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2**⁵⁶;
 - ix. the rounded value of the selected LIS threshold;
 - x. the threshold for the sub-class applicable for **option 1**⁵⁷ (pre-set LIS thresholds without annual recalculation) and for **option 2**⁵⁸ (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017** as provided in Section 8 of Annex III of draft RTS 9.
12. Please be aware that the table is not provided for weather derivatives because the data sample for this sub-class is too small to perform the calculations. As a result, the LIS threshold floor of €100,000 as provided in Section 11 of Annex III of draft RTS 9 is applied to this sub-class.

⁵⁶ According to option 2 in the Consultation Paper of December 2014 the selected threshold should also be greater than the LIS threshold floor, otherwise the latter would prevail.

⁵⁷ Option 1 in the Consultation Paper of December 2014.

⁵⁸ Option 2 in the Consultation Paper of December 2014.

13. Last but not least, it is evident that for some sub-classes the LIS thresholds obtained according to criterion 1 and criterion 2 differ substantially. Furthermore, there are additional complications with the calculations when the number of trades is relatively small. ESMA is aware of these shortcomings and will undertake to fine-tune the methodology proposed in order to tackle these issues after having received feedback to the CP.

LIS calculations										
Freights	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value as in Annex III of draft RTS 9
Freights	10%	293,719	16,352	11,489,210,064	10.00%	46.34%	300,000	593,158	600,000	100,000
Freights	30%	120,751	49,055	17,497,419,686	30.00%	70.57%	100,000			
Freights	30%	593,158	6,542	7,438,389,317	4.00%	30.00%	600,000			

Table 59: Freight derivatives - LIS calculations

LIS calculations										
Emissions	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value as in Annex III of draft RTS 9
Emissions	10%	190,550	1,520	2,102,391,795	10.00%	81.28%	200,000	9,750,000	10,000,000	100,000
Emissions	30%	53,000	4,560	2,409,648,981	30.00%	93.16%	50,000			
Emissions	30%	9,750,000	31	783,779,000	0.20%	30.30%	10,000,000			

Table 60: Emissions derivatives - LIS calculations

LIS calculations										
Other Exotic	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value as in Annex III of draft RTS 9
Other Exotic	10%	4,686,597	529	13,214,816,778	10.00%	84.22%	4,500,000			
Other Exotic	30%	550,452	1,587	15,088,992,916	30.01%	96.16%	600,000	75,431,455	75,000,000	600,000
Other Exotic	30%	75,431,455	31	4,780,427,880	0.59%	30.47%	75,000,000			

Table 61: Other exotic derivatives - LIS calculations

Alternative B

14. ESMA considers a second alternative (**alternative B**) which provides for a further division of the 4 sub-classes considered in alternative A on the basis of the contract types.

15. The following set of tables provides statistics per combination of:

- i. underlying type (freights, emissions, other exotics, weather) and;
- ii. contract type (futures (FU), options (OP), forwards (FW) and swaps (SW) and others (OT))

Freights	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Notional Amount per trade
FU	151,465	92.63%	2,330.2	22,987,279,444	92.71%	353,650,453	66	102%	151,766.28
OP	10,159	6.21%	156.3	1,650,186,989	6.66%	25,387,492	58	89%	162,436
FW	1,212	0.74%	18.6	68,664,029	0.28%	1,056,370	46	71%	56,653
SW	540	0.33%	8.3	73,505,313	0.30%	1,130,851	58	89%	136,121
OT	141	0.09%	2.2	13,933,715	0.06%	214,365	9	14%	98,821
Total	163,517	100%	2,516	24,793,569,490	100%	381,439,531	67	103%	151,627

Table 63: Freight derivatives statistics⁵⁹

Emissions	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Notional Amount per trade
FU	13,941	91.72%	214.5	2,458,198,491	95.03%	37,818,438	64	98%	176,328.71
OP	9	0.06%	0.1	13,640,000	0.53%	209,846	5	8%	1,515,556
FW	327	2.15%	5.0	23,553,411	0.91%	362,360	50	77%	72,029
SW	25	0.16%	0.4	16,591,682	0.64%	255,257	8	12%	663,667
OT	897	5.90%	13.8	74,711,186	2.89%	1,149,403	14	22%	83,290
Total	15,199	100%	234	2,586,694,770	100%	39,795,304	64	98%	170,188

Table 64: Emissions derivatives statistics⁶⁰

⁵⁹ 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

⁶⁰ 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

Other Exotic	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Notional Amount per trade
FU	3,013	56.97%	46.4	599,358,255	3.82%	9,220,896	47	72%	198,924
FW	1,573	29.74%	24.2	10,729,491,952	68.38%	165,069,107	59	91%	6,821,037
SW	345	6.52%	5.3	331,588,292	2.11%	5,101,358	15	23%	961,125
OT	358	6.77%	5.5	4,030,604,068	25.69%	62,009,293	55	85%	11,258,671
Total	5,289	100%	81	15,691,042,568	100%	241,400,655	73	112%	2,966,731

Table 65: Other exotic derivatives statistics⁶¹

Weather	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Notional Amount per trade
SW	2	100.00%	0.03	10,900	100.00%	168	2	3%	5,450
Total	2	100%	0.03	10,900	100%	168	2	3%	5,450

Table 66: Weather derivatives statistics⁶²

16. From the tables above, it is evident that almost the totality of the contracts executed in freight and emissions derivatives are futures (roughly 93% and 92% respectively). As far as other exotic derivatives are concerned, the majority of contracts executed are futures, (roughly 57%) but a large share (approximately 30%) is also represented by forwards. Last but not least, it is evident that the average notional amount per trade differs significantly from one contract type to the other across all sub-classes.
17. The tables below present the detailed results of the calculations to set the large in scale thresholds for each sub-class defined as combination of underlying and contract type. As in the previous section on **alternative A** the threshold has been determined as the greater of:
- i. the threshold calculated so that at least 70% of the trades would lie below the threshold and;
 - ii. the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.

The SSTI threshold is then set as 50% of the relevant LIS.

⁶¹ The data sample collected for exotic derivatives does not include trades on option contracts. Furthermore, 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

⁶² The data sample collected for weather derivatives only includes trades on swap contracts. Furthermore, 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

18. Furthermore, the tables also include the results of the simulation of the calculation of the thresholds according to ESMA's preferred option⁶³ which provides for annual recalculation of the LIS and SSTI thresholds, as already summarised in the previous section on **alternative A**.
19. More specifically for each type of derivatives one table - "LIS calculations" - including the following information is provided:
- i. for each sub-class defined per contract type, the LIS threshold calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**);
 - ii. for each sub-class defined per contract type, the LIS threshold calculated so that at least 70% of the trades are below the LIS threshold;
 - iii. for each sub-class defined per contract type, the LIS threshold calculated so that at least 70% of the notional amount is below the threshold (**criterion 2**);
 - iv. the number of trades above the LIS threshold;
 - v. the notional amount corresponding to the trades above the LIS threshold;
 - vi. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - vii. the rounded value of the LIS threshold;
 - viii. for each sub-class defined per contract type, the selected LIS threshold as the greater between the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2**⁶⁴;
 - ix. the rounded value of the selected LIS threshold;
 - x. the threshold for the sub-class applicable for **option 1**⁶⁵ (pre-set LIS thresholds without annual recalculation) and for **option 2**⁶⁶ (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017** and that should be included in the draft RTS in the case **alternative B** prevails. Please be aware that the current table in Section 8 of Annex III of draft RTS 9 reflects the outcome under **alternative A**.

⁶³ Option 2 in the Consultation Paper of December 2014.

⁶⁴ According to option 2 in the Consultation Paper of December 2014 the selected threshold should also be greater than the LIS threshold floor, otherwise the latter would prevail.

⁶⁵ Option 1 in the Consultation Paper of December 2014.

⁶⁶ Option 2 in the Consultation Paper of December 2014.

The table to be included in the draft RTS and reflecting the outcome under **alternative B** is provided in Annex 2.3.2.

20. Please be aware that, the table is not provided for weather derivatives because the data sample for this sub-class is too small to perform the calculations furthermore, it only includes trades on swap contracts.
21. Last but not least, for the sub-classes for which calculations were not performed due to the size of the data sample, i.e. all weather derivatives and other exotic options, the threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9 is applied.
22. Last but not least, it is evident that for some sub-classes the LIS thresholds obtained according to criterion 1 and criterion 2 differ substantially. Furthermore, there are additional complications with the calculations when the number of trades is relatively small. ESMA is aware of these shortcomings and will undertake to fine-tune the methodology proposed in order to tackle these issues after having received feedback to the CP.

LIS calculations										
Freights	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value as in Annex III of draft RTS 9
Options	10%	435,140	1,016	1,001,713,187	10.00%	60.70%	400,000	1,142,242	1,000,000	100,000
Options	30%	88,116	3,048	1,407,903,380	30.00%	85.32%	90,000			
Options	30%	1,142,242	284	495,635,643	2.80%	30.04%	1,000,000			
Sw aps	10%	250,205	54	20,057,645	10.00%	27.29%	300,000	250,205	300,000	200,000
Sw aps	30%	159,551	162	41,520,462	30.00%	56.49%	200,000			
Sw aps	30%	236,607	62	22,220,057	11.48%	30.23%	200,000			
Forw ards	10%	143,880	121	32,538,739	9.98%	47.39%	100,000	238,650	200,000	100,000
Forw ards	30%	51,440	364	55,433,909	30.03%	80.73%	50,000			
Forw ards	30%	238,650	54	20,601,665	4.46%	30.00%	200,000			
Futures	10%	289,368	15,147	10,395,865,289	10.00%	45.22%	300,000	561,330	600,000	100,000
Futures	30%	122,564	45,440	15,967,729,049	30.00%	69.46%	100,000			
Futures	30%	561,330	6,366	6,896,620,829	4.20%	30.00%	600,000			
OTHERS	10%	148,673	14	4,254,034	9.93%	30.53%	100,000	148,673	100,000	100,000
OTHERS	30%	94,462	42	7,801,872	29.79%	55.99%	90,000			
OTHERS	30%	148,673	13	4,254,034	9.22%	30.53%	100,000			

Table 67: Freight derivatives - LIS calculations

LIS calculations										
Emissions	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value as in Annex III of draft RTS 9
Options	10%	4,000,000	1	4,000,000	11.11%	29.33%	4,000,000	4,000,000	4,000,000	2,000,000
Options	30%	2,250,000	3	8,500,000	33.33%	62.32%	2,000,000			
Options	30%	2,250,000	1	6,250,000	11.11%	45.82%	2,000,000			
Sw aps	10%	878,400	3	5,094,226	12.00%	30.70%	900,000	878,400	900,000	900,000
Sw aps	30%	876,000	8	9,481,426	32.00%	57.15%	900,000			
Sw aps	30%	878,400	2	5,094,226	8.00%	30.70%	900,000			
Forw ards	10%	200,000	33	9,820,177	10.09%	41.69%	200,000	260,000	300,000	100,000
Forw ards	30%	69,176	98	17,293,536	29.97%	73.42%	70,000			
Forw ards	30%	260,000	20	7,210,736	6.12%	30.61%	300,000			
Futures	10%	179,750	1,394	2,025,202,933	10.00%	82.39%	200,000	10,750,000	10,000,000	100,000
Futures	30%	52,600	4,182	2,301,049,210	30.00%	93.61%	50,000			
Futures	30%	10,750,000	27	743,333,000	0.19%	30.24%	10,000,000			
OTHERS	10%	235,400	90	41,389,490	10.03%	55.40%	200,000	481,500	500,000	100,000
OTHERS	30%	53,700	269	62,021,500	29.99%	83.02%	50,000			
OTHERS	30%	481,500	28	22,568,650	3.12%	30.21%	500,000			

Table 68: Emissions derivatives - LIS calculations

LIS calculations										
Other Exotic	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value selection	LIS value selected rounded	LIS value for RTS (Annex 2.3.2)
Sw aps	10%	3,834,854	35	210,148,013	10.14%	63.38%	4,000,000	5,992,656	6,000,000	300,000
Sw aps	30%	293,500	104	311,643,520	30.14%	93.99%	300,000			
Sw aps	30%	5,992,656	13	99,767,538	3.77%	30.09%	6,000,000			
Forw ards	10%	12,665,741	157	7,473,631,872	9.98%	69.66%	15,000,000	100,000,000	100,000,000	3,500,000
Forw ards	30%	3,367,728	472	9,474,754,252	30.01%	88.31%	3,500,000			
Forw ards	30%	100,000,000	19	3,275,848,794	1.21%	30.53%	100,000,000			
Futures	10%	306,048	301	202,092,289	9.99%	33.72%	300,000	340,000	300,000	300,000
Futures	30%	291,906	904	380,121,436	30.00%	63.42%	300,000			
Futures	30%	340,000	230	180,094,259	7.63%	30.05%	300,000			
OTHERS	10%	36,192,742	36	2,749,882,093	10.06%	68.23%	35,000,000	75,431,455	75,000,000	5,500,000
OTHERS	30%	5,602,857	107	3,837,525,870	29.89%	95.21%	5,500,000			
OTHERS	30%	75,431,455	8	1,224,546,653	2.23%	30.38%	75,000,000			

Table 69: Other exotic derivatives - LIS calculations⁶⁷

⁶⁷ The data sample collected for other exotic derivatives does not include trades on option contracts.

Proposal

24. With regard to the LIS and SSTI thresholds for the class of other derivatives, ESMA proposes two options which differ on the level of granularity used to define the different sub-classes, **alternative A** provides for 4 sub-classes on the basis of the type of underlying and **alternative B** further divide each of the 4 sub-classes on the basis of the contract types identified. More specifically,

- i. **Alternative A** - ESMA proposes for **option 1**⁶⁸ (pre-set LIS thresholds without annual recalculation) and for **option 2**⁶⁹ (annual recalculation of LIS thresholds from 2018 onwards) only for 2017 The LIS and SSTI thresholds provided in Section 8 of Annex III of draft RTS 9. This is ESMA's preferred alternative since it provides for a less complex framework with respect to alternative B.
- ii. **Alternative B** - ESMA proposes for **option 1** and for **option 2** only for 2017 the LIS and SSTI thresholds provided in Annex 2.3.2.

Q7. Which is your preferred option? Please express your preference either for "Alternative A" or for "Alternative B". If you disagree with both ESMA's proposals provide your alternative proposal by answering the following question.

Q8. Please specify, for each class (defined as follows if you have stated your preference for Alternative A: freight derivatives, emissions derivatives, weather derivatives and other exotic derivatives. Defined as combination of underlying type and contract type if you have stated a preference for Alternative B: freight options, freight futures, freight forwards, etc.) if you agree on the following points providing reasons for your answer and, if you disagree, providing ESMA with your alternative proposal:

(1) deferral period set to 48 hours

(2) size specific to the instrument threshold set as 50% of the large in scale threshold

(3) volume measure used to set the large in scale and size specific to the instrument threshold as specified in Annex II, Table 3 of draft RTS 9

(4) pre-trade and post-trade thresholds set at the same size

⁶⁸ Option 1 in the Consultation Paper of December 2014.

⁶⁹ Option2 in the Consultation Paper of December 2014.

(5) large in scale thresholds: (a) state your preference for the system to set the thresholds (i.e. annual recalculation of the thresholds vs. no recalculation of the thresholds) (b) in the case of a preference for a system with no recalculation (i.e. option 1), provide feedback on the thresholds determined. In the case of a preference for a system with recalculation (i.e. option 2), provide feedback on the thresholds determined for 2017 and on the methodology to recalculate the thresholds from 2018 onwards including the level of granularity of the classes on which the recalculations will be performed.

Annex 2.3.1: Details on the cleansing of TRs data for other derivatives

25. The analysis based on TRs data, which focused on the assessment of the liquidity of other derivatives, required an extensive cleansing and screening phase. In particular, the following steps were undertaken:

- i. selection of records based on the date of execution of the trade; only trades executed in the period 1 March – 31 May 2014 were retained;
- ii. identification of records based on the venue of execution⁷⁰;
- iii. in general, only records whose action type was flagged as “N=new” “M=modify” or empty were considered for the analysis;
- iv. selection of unique trade ID records per TR and across all TRs, in other words only one record per trade ID was included in the final dataset;
- v. records flagged as contract resulting from a compression exercise or intragroup transactions as defined in Article 3 of Regulation (EU) No 648/2012 or compressions were excluded;
- vi. identification of other derivatives. The selection was carried out by means of fields 45 and 46 of Table 2 included in the delegated regulation (EU) No 148/2013, i.e. “Commodity base” equal to “FR”, “EV” or “EX” and “Commodity details” equal to “WE”, “EM”. Further screening for contract types (i.e. futures, options, swaps, etc.) was possible by means of field 3 of Table 2 (“Product ID 2”). However, additional screening of the data was based on the notional amount. In particular, consistency in the calculations performed to provide the data for the notional amount were carried out by means of fields 12, 14, 15 and 16 of Table 2 included in the delegated regulation (EU) No 148/2013, i.e. “Price/rate”, “Notional amount”, “Price multiplier” and “Quantity”;
- vii. all records for which a classification was not possible because of missing or incoherent information provided in the report were excluded;
- viii. extreme values of notional amount were excluded from the calculations;
- ix. all values were converted into Euro on the basis of the simple average of the ECB foreign exchange reference rates over the three-month period considered⁷¹.

⁷⁰ Records flagged as XOFF, XXXX, “OFF FACILY” or with an empty field were considered to be OTC trades

26. ESMA is fully aware of quality issues related to the data reported to TRs, especially in the first months after the start of TR reporting. ESMA already put in practice in October 2014 a data quality plan to address those issues. They are mainly due to the absence of a commonly-agreed trade identifier, the incorrect or inconsistent reporting of some data fields or the difficulty that some counterparties faced in obtaining the LEI on time for the go-live of the trade repository system on 12 February 2014. Indeed, a wider use of a unique trade identifier and of the LEI would have facilitated reconciliation of the reports per and across TRs and ESMA's analysis. Furthermore, data quality issues are further exacerbated by the heterogeneous interpretation of the requirements provided by the Regulation in terms of product classification during the initial implementation period of the reporting system, which corresponds to the period available for a comprehensive analysis of the non-equity universe. However, ESMA considers that the quality of TRs' data is, all in all, sufficient to provide a general overview of the OTC trading activity of a class of derivatives over a certain period.

⁷¹ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

Annex 2.3.2: Alternative B - LIS and SSTI thresholds

27. Here below the alternative Table 68 to be included in Section 8 of Annex III of draft RTS 9 reflecting the outcome under **alternative B** which, with respect to alternative A, provides for further granularity of the classes on the basis of the contract types.

Table 68 – Alternative B
Other derivatives – classes not having a liquid market

FREIGHT DERIVATIVES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
Freight Options	100,000	50,000
Freight Swaps	200,000	100,000
Freight Forwards	100,000	50,000
Freight Futures	100,000	50,000
Other Freight Derivatives	100,000	50,000
EMISSIONS DERIVATIVES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
Emissions Options	2,000,000	1,000,000
Emissions Swaps	900,000	450,000
Emissions Forwards	100,000	50,000
Emissions Futures	100,000	50,000
Other Emissions Derivatives	100,000	50,000
WEATHER DERIVATIVES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
Weather Options	100,000	50,000
Weather Swaps	100,000	50,000
Weather Forwards	100,000	50,000
Weather Futures	100,000	50,000
Other Weather Derivatives	100,000	50,000
OTHER DERIVATIVES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
Options	100,000	50,000
Swaps	300,000	150,000
Forwards	3,500,000	1,750,000
Futures	300,000	150,000
Others	5,500,000	2,750,000

2.4. Contracts for difference

Liquid market definition

[Section 3.5 of the CP - Liquid market definition for non-equity financial instruments]

1. A financial contract for difference (CFD) is a derivative⁷² product that gives the holder an economic exposure, which can be long or short, to the difference between the price of an underlying asset at the start of the contract and the price when the contract is closed.
2. ESMA understands that CFDs are rather flexible financial derivatives and suitable to give exposure to a variety of different underlying instruments such as single shares and other transferable securities, indices and currencies. CFDs are mostly, if not exclusively traded OTC. For the purpose of determining whether there is a liquid market in CFDs and in order to establish proper initial large in scale thresholds ESMA collected data in respect of all CFDs regardless the type of underlying instrument over the period 1 March 2014 – 31 May 2014. In particular, the data source used for contracts on equity instruments, bonds, futures and options on equity is the transaction reporting system available to one NCA. However, since such data set was limited to reportable CFD transactions where the underlying instrument is admitted to trading on a regulated market or a prescribed market (whether or not the transaction was carried out on such a market – in fact, all transactions in the data set were executed over-the-counter), thus not capturing CFDs on non-reportable financial instruments under MiFID I such as indices, currencies and commodities, the dataset was complemented with TRs data to cover such instruments.
3. In summary the following CFD classes, defined at the type of underlying level, were identified:
 - i. equity;
 - ii. bond;
 - iii. futures on equity;
 - iv. option on equity;
 - v. commodity; and
 - vi. currency (FX).

⁷² Annex I, Section C(9) of Directive 2014/65/EU and Annex I, Section C(9) of Directive 2004/39/EC.

4. The following chart shows the distribution of notional amount recorded over the three-month period among the classes of CFDs identified in the data set:

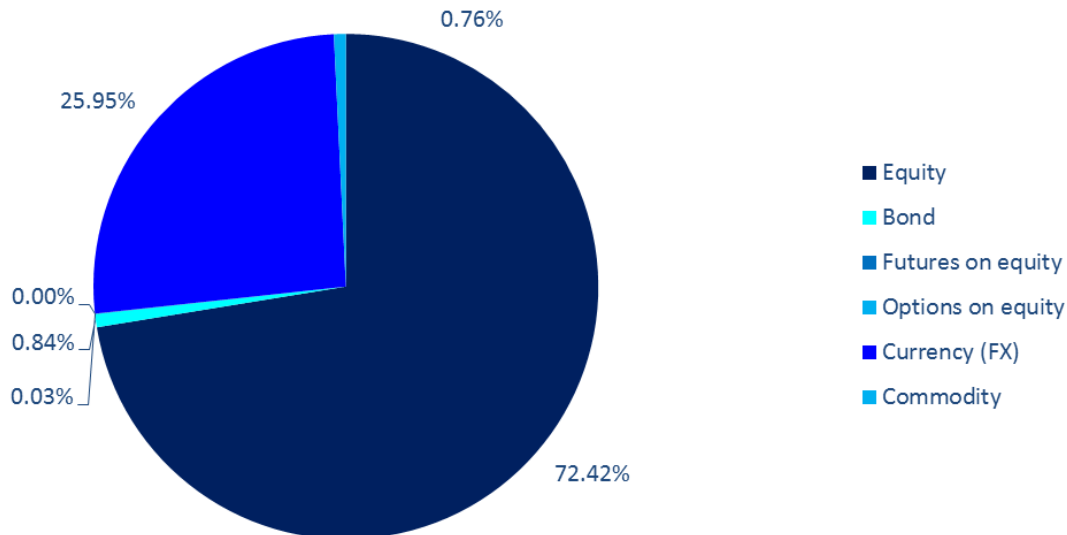


Chart 9: CFDs – notional amount distribution

5. CFDs having an equity instrument as underlying are as expected the most relevant category of CFD reported, representing around 72% of the notional amount traded, followed by contracts on currencies.
6. The next table provides the statistics in terms of number of trades, notional amount traded and days traded over the period considered, together with the results of the first step of the analysis which required the classification of the above classes as liquid or illiquid on the basis of the following criteria:
- i. average notional amount per day⁷³ greater than or equal to €500 m ('notional amount per day' in the following tables);
 - ii. number of days traded greater than or equal to 80% of the available trading days in the period⁷⁴;
 - iii. average number of trades per day⁷⁵ greater than or equal to 100 ('number of trades per day' in the following tables).

⁷³ Calculated as total notional amount traded divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁷⁴ Calculated as the number of different days on which a trade was recorded divided by the number of trading days over the period, considered to be 65. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

Underlying type	Num of trades	Num of trades (%)	Num of trades per day	Notional Amount	Notional Amount (%)	Notional Amount per day	Num of days traded	Num of days traded (%)	Liquid/Illiquid Classes
Equity	14,528,483	70.663%	223,515	1,090,089,444,952	72.420%	16,770,606,845	92	142%	LIQUID
Bond	47,339	0.230%	728	12,639,449,247	0.840%	194,453,065	79	122%	ILLIQUID
Futures on equity	518	0.003%	8	422,815,104	0.028%	6,504,848	57	88%	ILLIQUID
Options on equity	1,674	0.008%	26	63,314,736	0.004%	974,073	64	98%	ILLIQUID
Currency (FX)	5,769,052	28.059%	88,755	390,573,534,135	25.948%	6,008,823,602	92	142%	LIQUID
Commodity	213,250	1.037%	3,281	11,450,835,695	0.761%	176,166,703	91	140%	ILLIQUID
Total	20,560,316	100%	316,313	1,505,239,393,869	100%	23,157,529,136	92	142%	

Table 71: CFDs statistics (part I)⁷⁶

7. On the basis of the above, CFDs on the following types of underlying are qualified as illiquid:
 - i. bond;
 - ii. futures on equity;
 - iii. option on equity; and
 - iv. commodity.

8. The next step of the analysis consisted in further refining the liquid classes, namely (i) CFDs on equities and (ii) CFDs on currencies, into liquid and illiquid sub-classes by means of an additional set of qualitative criteria and to assess the liquidity of each sub-class on the basis of quantitative thresholds, defined per class in terms of:
 - i. average number of trades per day; and
 - ii. average notional amount per day.

9. The following sections provide the analysis per class in more detail.

⁷⁵ Calculated as total number of trades divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁷⁶ 65 days corresponds to the number of working days in this period. Since OTC trades can be carried out at any time, the number of days traded may be above 65 and, as a result, the related percentage may be greater than 100%.

CFDs on equity

10. In the dataset of CFDs on equity, ESMA identified 379,547 different equity CFDs which are based on a total of 22,742 different underlying instruments including shares admitted to trading on a regulated market. The vast majority of underlying instruments was represented by shares.
11. The sample was divided using the current definition of liquid shares under MiFID I as follows:
 - i. CFDs on liquid shares, including all CFDs on liquid shares under MiFID I;
 - ii. CFDs on illiquid shares including all shares classified as illiquid according to MiFID I and all non-MiFID shares.
12. The following chart shows the distribution in terms of number of different underlying instruments between the two groups:

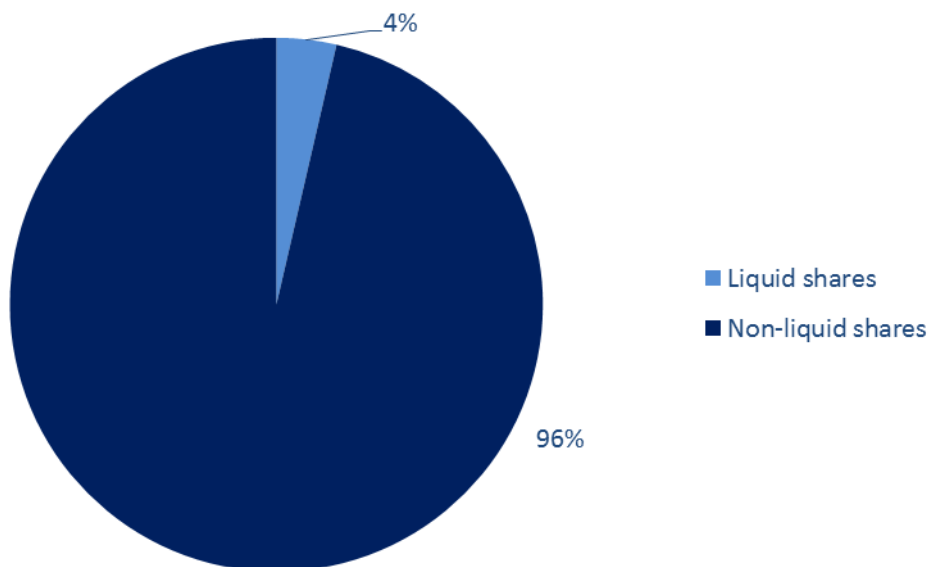


Chart 10: CFDs on equity – groups based on underlying type distribution

13. Each sub-group was then divided into sub-classes defined at the level of the underlying type (i.e. at the level of the individual share). More specifically, the trading activity of equivalent contracts on the same underlying (i.e. on the same share) was aggregated.

14. ESMA has observed significantly different trading patterns between the two sub-groups. On that basis ESMA has assessed the liquidity of each sub-class, defined at the level of each individual underlying instrument (i.e. at the level of the individual share), according to the following thresholds:
 - i. average number of trades per day equal to or greater than 10; and
 - ii. average notional amount per day equal to or greater than €1m
15. The analysis confirmed that CFDs based on a liquid share are indeed significantly more liquid than those based on an illiquid share. More precisely, 80% of the sub-classes of CFDs based on a liquid share passed the liquidity thresholds defined in the previous paragraph, while the figure is only 3% of the sub-classes for CFDs based on a share for which there is no liquid market. Consequently, CFDs on liquid shares would then be classified as liquid, while CFDs on illiquid shares as illiquid. As a result, the liquid sub-classes of CFDs on equity would represent 64% in terms of notional amount and trades of the overall class CFDs on equity.
16. The following table summarises the above results at the sub-group level. In particular, it provides the following information:
 - i. the number of sub-classes identified, i.e. the number of CFDs aggregated per underlying type (“Num of CFDs per underlying type”);
 - ii. the total number of trades executed for all sub-classes of CFDs on liquid shares and for all sub-classes of CFDs on illiquid shares (“Num of trades”);
 - iii. the average number of trades per day for the sub-group of CFDs on liquid shares and that of CFDs on illiquid shares (“Num of trades per day”);
 - iv. the average daily number of trades per underlying type (“Avg daily num of trades per underlying type”), calculated according to the following formula:
$$(\text{“Num of trades”}) / 65 / (\text{“Num of CFDs per underlying type”})$$
 - v. the total notional amount recorded for all sub-classes of CFDs on liquid shares and for all sub-classes of CFDs on illiquid shares (“Notional Amount”)
 - vi. the average notional amount per day for the sub-group of CFDs on liquid shares and that of CFDs on illiquid shares (“Notional Amount per day”)
 - vii. the average daily notional amount per underlying type (“Avg daily Notional Amount per underlying type”), calculated according to the following formula:

(“Notional Amount”) / 65 / (“Num of CFDs per underlying type”)

- viii. the liquidity classification assigned to the whole group of CFDs on liquid (illiquid) shares and therefore, applicable to all sub-classes of CFDs on liquid (illiquid) shares (“Liquidity Flag”);
- ix. the percentage of sub-classes in each sub-group meeting the liquidity thresholds defined above - average number of trades per day equal to or greater than 10; and average notional amount per day equal to or greater than €1m – (“% of CFDs per underlying type meeting the liquidity thresholds”). In other words, 660 out of 825 sub-classes belonging to the CFDs on liquid shares group which are all qualified as liquid also meet the liquidity thresholds. Furthermore, 658 out of 21,917 sub-classes belonging to the CFDs on illiquid shares group which are all qualified as illiquid meet the liquidity criteria.

CFD (EQUITY)	Num of CFDs per underlying type	Num of trades	Num of trades per day	Avg daily num of trades per underlying type	Notional Amount	Notional Amount per day	Avg daily Notional Amount per underlying type	Liquidity Flag	% of CFDs per underlying type meeting the liquidity thresholds
Liquid shares	825	9,246,445	142,253	172	693,116,896,225	10,663,336,865	12,925,257	Liquid	80%
Non-liquid shares	21,917	5,282,095	81,263	4	396,972,548,700	6,107,269,980	278,654	Illiquid	3%
Total	22,742	14,528,540			1,090,089,444,925				

Table 72: CFDs on currency - liquidity assessment

CFDs on currency

17. The sub-classes of CFDs on currencies were defined on the basis of only one qualitative criterion, namely the currency pair of the underlying foreign exchange rate.
18. In total, 93 sub-classes were identified and 8 of them were classified as liquid on the basis of the following quantitative thresholds:
 - i. average notional amount per day⁷⁷ greater than or equal to €50 m ('notional amount per day' in the following table);
 - ii. average number of trades per day⁷⁸ greater than or equal to 50 ('number of trades per day' in the following table).
19. Those 8 liquid classes, represent 80% of the trades and 94% of the notional amount traded of the whole class of CFDs on currencies.
20. Here below the detailed results per sub-class in relation to the assessment of liquidity. On the top of the table the quantitative criteria applied to assess the liquidity of the sub-class, and on which the "Liquidity Flag" is based, are indicated. Last but not least, the notional amount represents the notional amount traded whose value was then converted into Euro on the basis of the simple average of the ECB exchange rate over the three-month period considered⁷⁹.

⁷⁷ Calculated as total notional amount traded divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁷⁸ Calculated as total number of trades divided by the number of trading days over the period, considered to be 65. 65 days corresponds to the number of working days in this period.

⁷⁹ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

CFD (Currency)					Criteria applied for liquidity classification
Notional Amount per day					50,000,000
Num of trades per day					500
CFD (Currency)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
USD-XAU	409,737	6,303.65	235,970,284,788	3,630,312,074	Liquid
EUR-USD	1,717,448	26,422.28	63,412,753,294	975,580,820	Liquid
JPY-USD	765,701	11,780.02	23,964,456,261	368,683,942	Liquid
GBP-USD	624,339	9,605.22	17,740,263,295	272,927,128	Liquid
EUR-JPY	415,167	6,387.18	9,223,820,081	141,904,924	Liquid
HKD-USD	5,573	85.74	7,000,644,870	107,702,229	Illiquid
GBP-JPY	316,051	4,862.32	6,891,583,852	106,024,367	Liquid
CHF-EUR	119,227	1,834.26	4,640,206,063	71,387,786	Liquid
AUD-USD	261,527	4,023.49	4,561,141,177	70,171,403	Liquid
CAD-USD	151,382	2,328.95	2,102,346,451	32,343,792	Illiquid
CHF-USD	162,287	2,496.72	1,830,553,752	28,162,365	Illiquid
AUD-JPY	121,648	1,871.51	1,635,945,081	25,168,386	Illiquid
EUR-GBP	75,955	1,168.54	1,289,872,849	19,844,198	Illiquid
AUD-GBP	46,712	718.65	1,224,283,228	18,835,127	Illiquid
AUD-EUR	89,560	1,377.85	1,090,329,096	16,774,294	Illiquid
CNH-USD	6,166	94.86	1,003,666,238	15,441,019	Illiquid
NZD-USD	92,324	1,420.37	948,967,583	14,599,501	Illiquid
CAD-EUR	35,371	544.17	815,058,945	12,539,368	Illiquid
CHF-GBP	34,701	533.86	768,335,966	11,820,553	Illiquid
CAD-GBP	15,507	238.57	408,598,382	6,286,129	Illiquid
AUD-NZD	36,813	566.35	385,915,166	5,937,156	Illiquid
TRY-USD	12,641	194.48	381,526,364	5,869,636	Illiquid
CHF-JPY	36,334	558.98	367,950,726	5,660,780	Illiquid
GBP-NZD	18,892	290.65	356,667,332	5,487,190	Illiquid
JPY-NZD	40,116	617.17	338,568,768	5,208,750	Illiquid
BRL-EUR	18	0.28	275,372,770	4,236,504	Illiquid
EUR-TRY	12,410	190.92	261,071,497	4,016,485	Illiquid
CAD-JPY	31,243	480.66	244,725,119	3,765,002	Illiquid
AUD-CAD	39,420	606.46	228,583,988	3,516,677	Illiquid
CNY-USD	1,674	25.75	201,155,959	3,094,707	Illiquid
EUR-NZD	14,608	224.74	164,942,381	2,537,575	Illiquid
GBP-INR	7	0.11	156,545,149	2,408,387	Illiquid
AUD-CHF	14,192	218.34	132,446,799	2,037,643	Illiquid
USD-XAG	841	12.94	80,815,334	1,243,313	Illiquid
CAD-CHF	10,411	160.17	74,121,717	1,140,334	Illiquid
GBP-THB	116	1.78	63,250,177	973,080	Illiquid
CAD-NZD	7,193	110.66	47,820,587	735,701	Illiquid
INR-USD	1,952	30.03	28,432,023	437,416	Illiquid
CHF-NZD	4,574	70.37	23,940,173	368,310	Illiquid
DKK-USD	503	7.74	21,091,213	324,480	Illiquid

CFD (Currency)					Criteria applied for liquidity classification
Notional Amount per day					50,000,000
Num of trades per day					500
CFD (Currency)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
EUR-THB	372	5.72	20,500,995	315,400	Illiquid
SGD-USD	2,115	32.54	19,157,235	294,727	Illiquid
MXN-USD	2,576	39.63	16,328,131	251,202	Illiquid
USD-ZAR	1,406	21.63	15,011,822	230,951	Illiquid
THB-USD	303	4.66	12,496,328	192,251	Illiquid
EUR-ZAR	712	10.95	12,305,051	189,308	Illiquid
EUR-RUB	2,601	40.02	9,464,011	145,600	Illiquid
KRW-USD	679	10.45	9,356,227	143,942	Illiquid
EUR-HUF	1,372	21.11	9,147,104	140,725	Illiquid
HUF-USD	1,183	18.20	8,847,204	136,111	Illiquid
EUR-SGD	347	5.34	8,150,467	125,392	Illiquid
EUR-SEK	438	6.74	8,022,758	123,427	Illiquid
SEK-USD	389	5.98	7,143,723	109,903	Illiquid
EUR-NOK	530	8.15	6,752,932	103,891	Illiquid
EUR-AED	353	5.43	6,433,090	98,971	Illiquid
CNY-EUR	7	0.11	6,282,267	96,650	Illiquid
EUR-HKD	310	4.77	6,086,003	93,631	Illiquid
PLN-USD	277	4.26	5,011,099	77,094	Illiquid
JPY-TRY	55	0.85	4,953,494	76,208	Illiquid
EUR-TWD	3	0.05	4,793,447	73,745	Illiquid
RON-USD	12	0.18	4,185,200	64,388	Illiquid
EUR-PLN	249	3.83	2,703,833	41,597	Illiquid
GBP-SEK	161	2.48	2,312,585	35,578	Illiquid
EUR-KRW	2	0.03	1,918,288	29,512	Illiquid
RUB-USD	554	8.52	1,647,085	25,340	Illiquid
GBP-PLN	875	13.46	1,465,923	22,553	Illiquid
NOK-USD	168	2.58	859,026	13,216	Illiquid
EUR-XAU	59	0.91	716,433	11,022	Illiquid
EUR-RON	4	0.06	630,732	9,704	Illiquid
GBP-SGD	93	1.43	425,718	6,550	Illiquid
GBP-AED	97	1.49	403,927	6,214	Illiquid
CLP-USD	4	0.06	286,129	4,402	Illiquid
GBP-HUF	46	0.71	259,635	3,994	Illiquid
GBP-ZAR	41	0.63	249,070	3,832	Illiquid
GBP-HKD	52	0.80	243,782	3,750	Illiquid
AUD-SGD	17	0.26	215,792	3,320	Illiquid
TWD-USD	66	1.02	165,353	2,544	Illiquid
GBP-NOK	40	0.62	139,069	2,140	Illiquid
DKK-GBP	37	0.57	94,775	1,458	Illiquid
NZD-SGD	35	0.54	67,339	1,036	Illiquid

CFD (Currency)					Criteria applied for liquidity classification
Notional Amount per day					50,000,000
Num of trades per day					500
CFD (Currency)	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Liquidity Flag
JPY-SGD	13	0.20	65,452	1,007	Illiquid
DKK-EUR	10	0.15	33,997	523	Illiquid
CZK-EUR	1	0.02	30,022	462	Illiquid
JPY-ZAR	15	0.23	26,488	408	Illiquid
EUR-KES	1	0.02	23,948	368	Illiquid
ILS-USD	4	0.06	13,012	200	Illiquid
EUR-ILS	1	0.02	9,986	154	Illiquid
CHF-HUF	6	0.09	9,800	151	Illiquid
CHF-NOK	10	0.15	9,787	151	Illiquid
HKD-JPY	2	0.03	9,502	146	Illiquid
CHF-DKK	2	0.03	8,202	126	Illiquid
NOK-SEK	3	0.05	3,679	57	Illiquid
JPY-SEK	3	0.05	2,681	41	Illiquid

Table 74: CFDs on currency - liquidity assessment

Proposal

21. In respect of CFDs on equities ESMA proposes to define as liquid any CFD where the underlying is a share for which there is a liquid market as determined in accordance with article 2(1)(17)(b) of Regulation 600/2014.

22. ESMA was not in a position to establish the liquidity of other sub-classes of equity such as CFDs based on ETFs or depositary receipts. On that basis ESMA is interested in views on a proposal for extending the same approach taken on shares to those types of underlying, i.e. determine as liquid all CFDs based on an equity or equity-like instrument for which there is a liquid market in accordance with article 2(1)(17)(b) of Regulation 600/2014.

Q9. Do you agree with the approach taken for shares where any CFD based on a liquid share would be considered as having a liquid market? More specifically, please provide feedback on the following:

(1) Would you prefer to follow a similar approach as that proposed in option 2 on liquidity for equity derivatives (paragraph 90 page 132 of December CP), i.e. qualify all CFDs on equity as liquid irrespectively of the liquidity of the underlying?

(2) Would you have used different criteria to define the classes or sub-classes?

(3) Would you have used different parameters or the same parameters (i.e. average number of trades per day and average notional amount traded per day) but different thresholds in order to define a sub-class as liquid?

(4) Would you support extending the approach taken for shares to other equity (ETFs, depositary receipts and certificates) and equity-like instruments?

23. As far as CFDs on currencies, ESMA is of the opinion that classes of financial instruments included in Annex III, Section 9 of draft RTS 9 are liquid.

Q10. Do you agree with ESMA's proposal for the definition of a liquid market for CFDs on currencies? Please provide a feedback on the following in your answer:

(1) Would you use different qualitative criteria to define the sub-classes?

(2) Would you use different parameters or the same parameters (i.e. average number of trades per day and average notional amount traded per day) but different thresholds in order to define a sub-class as liquid?

(3) Would you define sub-classes declared as liquid in ESMA's proposal as illiquid (or vice versa)? Please provide reasons for your answer.

Q11. Do you agree that CFDs on instruments other than equities and currencies are illiquid? If you do not agree with ESMA's proposal for the definition of a liquid market for those classes, please provide your alternative proposal specifying the following:

(1) How would you define the sub-classes, i.e. which qualitative criteria would you use?

(2) Which parameters and related thresholds would you use to classify a sub-class as liquid?

(3) Which sub-classes would you define as liquid?

Pre-trade and Post-trade transparency requirements for non-equity instruments

[Sections 3.6 - Pre-trade transparency for non-equity instruments and 3.7 - Post-trade transparency requirements for non-equity instruments of the CP]

24. The tables below present the detailed results of the calculations to set the large in scale thresholds for CFDs which are provided in Annex III Section 9 of the Draft RTS 9. The following rules have been applied in the determination of the thresholds⁸⁰:

- i. The threshold for liquid CFDs is the greater of:
 - a. The threshold determined so that at least 90% of the trades would lie below the threshold; and
 - b. The threshold floor determined for the class as provided in Section 11 of Annex III of the draft RTS 9.
- ii. The threshold for illiquid classes and sub-classes is the greater of:
 - a. The threshold determined so that at least 70% of the trades would lie below the threshold; and
 - b. The threshold floor determined for the class as provided in Section 11 of Annex III of draft RTS 9.
- iii. The size specific to the instrument (SSTI) would be set as 50% of the relevant LIS.

25. In the tables below more details on the calculations performed per class of CFDs are provided.

⁸⁰ This is the methodology to set the thresholds under option 1 and for year 2017 under option 2 in the Consultation Paper of December 2014.

CFDs on equities and currencies

26. The two following tables relate to CFDs on equities and currencies. The first table provided for each class (LIS calculations on the basis of 10% of trades above LIS rule) includes the following information:

- i. for all sub-classes (i.e. liquid and illiquid): the number of trades, the number of trades per day, the notional amount traded, the related notional amount per day and the notional amount per trade;
- ii. the LIS threshold calculated as follows:
 - a. for the liquid sub-classes: the LIS is calculated so that at least 90% of the trades are below the LIS threshold;
 - b. for the illiquid sub-classes (row “CFD on other equities” in the table on CFDs on equities and row “OTHERS” in the table on CFDs on currencies): the LIS is calculated so that at least 70% of the trades are below the LIS threshold;
- iii. the number of trades above the LIS threshold;
- iv. the notional amount corresponding to the trades above the LIS threshold;
- v. the related percentages of trades and notional amount of the trades above the LIS threshold;
- vi. the rounded value of the calculated LIS threshold;
- vii. the LIS threshold for the sub-class provided in Section 9 in Annex III of draft RTS 9 which is the greater of the threshold calculated as described above and the LIS threshold floor of €100,000 (as provided in Section 11 of Annex III of draft RTS 9). Furthermore, such LIS threshold corresponds to the:
 - a. applicable LIS threshold for the sub-class for **option 1**⁸¹ (pre-set LIS thresholds without annual recalculation);
 - b. applicable LIS threshold for the sub-class for **option 2**⁸² (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017**.

⁸¹ Option 1 in the Consultation Paper of December 2014.

⁸² Option 2 in the Consultation Paper of December 2014.

27. The second (“LIS calculations on the basis of 30% of notional amount above LIS rule”) table provided for each class include additional calculations related to the implementation of the annual recalculation of the LIS thresholds from 2018 onwards (**option 2**). In particular it includes the following information for each liquid sub-class:
- i. the LIS threshold calculated so that at least 70% of the notional amount is below the LIS threshold;
 - ii. the number of trades above the LIS threshold;
 - iii. the notional amount corresponding to the trades above the LIS threshold;
 - iv. the related percentages of trades and notional amount of the trades above the LIS threshold;
 - v. the rounded value of the calculated LIS threshold.
28. The third table (“Threshold selection”) includes the following information for each liquid sub-class:
- i. the LIS is calculated so that at least 90% of the trades are below the LIS threshold (**criterion 1**);
 - ii. the LIS is calculated so that at least 70% of the notional amount is below the LIS threshold (**criterion 2**);
 - iii. the selected LIS threshold as the greater of the threshold calculated according to **criterion 1** and the threshold calculated according to **criterion 2**⁸³;
 - iv. the rounded value of the selected LIS threshold;
 - v. the LIS threshold for the sub-class provided in Section 9 in Annex III of draft RTS 9.
29. Last but not least, it is evident that for some sub-classes the LIS thresholds obtained according to criterion 1 and criterion 2 differ substantially. Furthermore, there are additional complications with the calculations when the number of trades is relatively small. ESMA is aware of these shortcomings and will undertake to fine-tune the methodology proposed in order to tackle these issues after having received feedback to the CP.

⁸³ According to option 2 in the Consultation Paper of December 2014 this value should also be greater than the LIS threshold floor, otherwise the latter would prevail.

LIS calculations on the basis of 10% of trades above LIS rule													
CFD on equity	%	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Notional Amount per trade	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value as in Annex III of draft RTS 9
CFDs on liquid shares	10%	9,246,445	142,253	693,116,896,225	10,663,336,865	74,960	65,361	924,641	629,003,622,067	10.00%	90.75%	70,000	100,000
CFDs on other equities	30%	5,282,095	81,263	396,972,548,700	6,107,269,980	75,154	18,093	1,584,621	380,172,814,205	30.00%	95.77%	20,000	100,000

Table 75: CFD on equity - LIS calculations on the basis of 10% of trades above LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
CFD on equity	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
CFDs on liquid shares	30%	6,734,932	11,709	207,935,068,873	0.13%	30.00%	6,500,000

Table 76: CFD on equity - LIS calculations on the basis of 30% of notional amount above LIS rule

Threshold selection					
CFD on equity	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
CFDs on liquid shares	65,361	6,734,932	6,734,932	6,500,000	100,000

Table 77: CFD on equity - Threshold selection

LIS calculations on the basis of 10% of trades above LIS rule													
CFD on currency	%	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Notional Amount per trade	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value as in Annex III of draft RTS 9
USD-XAU	10%	409,737	6,304	235,970,284,788	3,630,312,074	575,907	46,247	40,974	233,916,759,342	10.00%	99.13%	50,000	100,000
EUR-USD	10%	1,717,448	26,422	63,412,753,294	975,580,820	36,923	50,000	171,745	52,905,838,621	10.00%	83.43%	50,000	100,000
JPY-USD	10%	765,701	11,780	23,964,456,261	368,683,942	31,297	50,766	76,570	19,565,905,455	10.00%	81.65%	50,000	100,000
GBP-USD	10%	624,339	9,605	17,740,263,295	272,927,128	28,414	40,420	62,434	14,205,417,765	10.00%	80.07%	40,000	100,000
EUR-JPY	10%	415,167	6,387	9,223,820,081	141,904,924	22,217	50,000	41,517	6,752,110,762	10.00%	73.20%	50,000	100,000
GBP-JPY	10%	316,051	4,862	6,891,583,852	106,024,367	21,805	36,405	31,605	4,836,329,060	10.00%	70.18%	40,000	100,000
CHF-EUR	10%	119,227	1,834	4,640,206,063	71,387,786	38,919	42,000	11,923	4,062,993,189	10.00%	87.56%	40,000	100,000
AUD-USD	10%	261,527	4,023	4,561,141,177	70,171,403	17,440	27,054	26,153	3,603,769,782	10.00%	79.01%	30,000	100,000
OTHERS	30%	1,139,855	17,536	24,169,025,324	371,831,159	21,204	5,356	341,957	22,805,999,196	30.00%	94.36%	10,000	100,000

Table 78: CFD on currency - LIS calculations on the basis of 10% of trades above LIS rule

LIS calculations on the basis of 30% of notional amount above LIS rule							
CFD on currency	%	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded
USD-XAU	30%	191,017,878	106	70,944,122,168	0.03%	30.06%	200,000,000
EUR-USD	30%	2,205,000	1,845	19,025,148,505	0.11%	30.00%	2,000,000
JPY-USD	30%	942,803	2,264	7,189,713,598	0.30%	30.00%	900,000
GBP-USD	30%	849,451	1,723	5,322,717,275	0.28%	30.00%	800,000
EUR-JPY	30%	360,000	4,085	2,767,182,230	0.98%	30.00%	400,000
GBP-JPY	30%	339,780	2,782	2,067,479,915	0.88%	30.00%	300,000
CHF-EUR	30%	23,463,000	52	1,409,817,000	0.04%	30.38%	25,000,000
AUD-USD	30%	431,639	1,425	1,368,624,917	0.54%	30.01%	400,000

Table 79: CFD on currency - LIS calculations on the basis of 30% of notional amount above LIS rule

Threshold selection					
CFD on currency	LIS value (10% of trades)	LIS value (30% notional amount)	LIS value selection	LIS value rounded	LIS value as in Annex III of draft RTS 9
USD-XAU	46,247	191,017,878	191,017,878	200,000,000	100,000
EUR-USD	50,000	2,205,000	2,205,000	2,000,000	100,000
JPY-USD	50,766	942,803	942,803	900,000	100,000
GBP-USD	40,420	849,451	849,451	800,000	100,000
EUR-JPY	50,000	360,000	360,000	400,000	100,000
GBP-JPY	36,405	339,780	339,780	300,000	100,000
CHF-EUR	42,000	23,463,000	23,463,000	25,000,000	100,000
AUD-USD	27,054	431,639	431,639	400,000	100,000

Table 80: CFD on currency - Threshold selection

Other CFDs

30. The two following tables relate to CFDs on all other underlying identified and provide the following information:

- i. for each sub-class: the number of trades, the number of trades per day, the notional amount traded, the related notional amount per day and the notional amount per trade;
- ii. the LIS threshold calculated so that at least 70% of the trades are below the LIS threshold;
- iii. the number of trades above the LIS threshold;
- iv. the notional amount corresponding to the trades above the LIS threshold;
- v. the related percentages of trades and notional amount of the trades above the LIS threshold;
- vi. the rounded value of the calculated LIS threshold;
- vii. the LIS threshold for the sub-class provided in Section 9 in Annex III of draft RTS 9 which is the greater of the threshold calculated as described above and the LIS threshold floor of €100,000 (as provided in Section 11 of Annex III of draft RTS 9). Furthermore, such LIS threshold corresponds to the:
 - a. applicable LIS threshold for the sub-class for **option 1**⁸⁴ (pre-set LIS thresholds without annual recalculation);
 - b. applicable LIS threshold for the sub-class for **option 2**⁸⁵ (annual recalculation of LIS thresholds from 2018 onwards) **only for 2017**.

⁸⁴ Option 1 in the Consultation Paper of December 2014.

⁸⁵ Option 2 in the Consultation Paper of December 2014.

LIS calculations													
CFD	%	Num of trades	Num of trades per day	Notional Amount	Notional Amount per day	Notional Amount per trade	LIS value	Trades above LIS	Notional Amount above LIS	Trades above LIS (%)	Notional Amount above LIS (%)	LIS value rounded	LIS value as in Annex III of draft RTS 9
CFDs on commodities	30%	213,250	3,281	11,450,835,695	176,166,703	53,697	16,060	63,975	10,472,797,858	30.00%	91.46%	20,000	100,000
CFDs on bonds	30%	47,339	728	12,639,449,247	194,453,065	266,999	7,164	14,201	12,615,078,077	30.00%	99.81%	10,000	100,000
CFDs on futures on equity	30%	518	8	422,815,104	6,504,848	816,245	539,782	155	373,820,087	29.92%	88.41%	500,000	500,000
CFDs on options on equity	30%	1,674	26	63,314,736	974,073	37,822	13,377	502	61,469,372	29.99%	97.09%	10,000	100,000

Table 82: Other CFDs - LIS calculations

Proposal

31. ESMA proposes for **option 1**⁸⁶ and for **option 2**⁸⁷ only for **2017** the LIS and SSTI thresholds provided in Section 9 of Annex III of draft RTS 9. The applicable LIS threshold floor is provided in Table 47 Section 11 of Annex III of draft RTS 9.

Q12. Do you agree with ESMA's proposal for CFDs? Please specify, for each sub-class (CFDs on equity, CFDs on currency, CFDs on commodity, CFDs on bonds, CFDs on futures on equity and CFDs on options on equity, others) if you agree on the following points providing reasons for your answer and, if you disagree providing ESMA with an alternative proposal regarding:

(1) deferral period set to 48 hours

(2) size specific to the instrument threshold set as 50% of the large in scale threshold

(3) volume measure used to set the large in scale and size specific to the instrument threshold as specified in Annex II, Table 3 of draft RTS 9

(4) pre-trade and post-trade thresholds set at the same size

(5) large in scale thresholds: (a) state your preference for the system to set the thresholds (i.e. annual recalculation of the thresholds vs. no recalculation of the thresholds) (b) in the case of a preference for a system with no recalculation (i.e. option 1), provide feedback on the thresholds determined. In the case of a preference for a system with recalculation (i.e. option 2), provide feedback on the thresholds determined for 2017 and on the methodology to recalculate the thresholds from 2018 onwards including the level of granularity of the classes on which the recalculations will be performed.

⁸⁶ Option 1 in the Consultation Paper of December 2014.

⁸⁷ Option 2 in the Consultation Paper of December 2014.

Annex 2.4.1: Details on the cleansing of data for CFDs

CFDs on equity, bond, futures, option on equity – data source: transaction reporting of an NCA

32. ESMA carried out cleaning and screening of the data set including:
- i. mapping of the underlying instrument: data was aggregated across equivalent contracts on the same underlying equity instrument;
 - ii. elimination of outliers, i.e. very large and very small transactions which are distant from the rest of the other observations in the distribution. Those outliers represent about 0.5% of the total number of transactions in the sample.

CFDs on currency and commodity – data source: TRs data

33. The analysis based on TRs data, which focused on the assessment of the liquidity of CFDs on currencies and commodity, required an extensive cleansing and screening phase. In particular, the following steps were undertaken:
- i. selection of records based on the date of execution of the trade; only trades executed in the period 1 March – 31 May 2014 were retained;
 - ii. identification of records based on the venue of execution⁸⁸, contracts executed on-venue and off-venue were retained;
 - iii. in general, only records whose action type was flagged as “N=new” “M=modify” or empty were considered for the analysis;
 - iv. selection of unique trade ID records per TR and across all TRs, in other words only one record per trade ID was included in the final dataset;
 - v. records flagged as contract resulting from a compression exercise or intragroup transactions as defined in Article 3 of Regulation (EU) No 648/2012 or compressions were excluded;
 - vi. identification of CFDs on currencies and commodities derivatives. The selection of CFDs was carried out by means of field 3 of Table 2 (“Product ID 2”) included in the delegated regulation (EU) No 148/2013. In particular, records with the field equal to

⁸⁸ Records flagged as XOFF, XXXX or with an empty field were considered to be OTC trades

“CD” were selected. Then the records had to be divided on the basis of the underlying type. Although some TRs provide data per asset class, for other TRs the selection was carried out by means of field 2 of Table 2 (“Product ID 1”). Records with the field equal to “CU” were considered to be CFDs on currencies, while those with this field equal to “CO” were considered to be CFDs on commodities. Additional screening of commodity contracts was carried out by means of the fields 45 and 46 of Table 2, i.e. “Commodity base” and “Commodity details”.

- vii. all records for which a classification was not possible because of missing or incoherent information provided in the report were excluded;
 - viii. extreme values of notional amount were excluded from the calculations;
 - ix. all values were converted into Euro on the basis of the simple average of the ECB foreign exchange reference rates over the three-month period considered⁸⁹.
34. ESMA is fully aware of quality issues related to the data reported to TRs, especially in the first months after the start of TR reporting. ESMA already put in practice in October 2014 a data quality plan to address those issues. They are mainly due to the absence of a commonly-agreed trade identifier, the incorrect or inconsistent reporting of some data fields or the difficulty that some counterparties faced in obtaining the LEI on time for the go-live of the trade repository system on 12 February 2014. Indeed, a wider use of a unique trade identifier and of the LEI would have facilitated reconciliation of the reports per and across TRs and ESMA’s analysis. Furthermore, data quality issues are further exacerbated by the heterogeneous interpretation of the requirements provided by the Regulation in terms of product classification during the initial implementation period of the reporting system, which corresponds to the period available for a comprehensive analysis of the non-equity universe. However, ESMA considers that the quality of TRs’ data is, all in all, sufficient to provide a general overview of the OTC trading activity of a class of derivatives over a certain period.

⁸⁹ Whenever the ECB foreign exchange reference rate was not available for a specific currency, data from commercial data providers was used.

3. RTS 9: Draft regulatory technical standards on transparency requirements in respect of bonds, structured finance products, emission allowances and derivatives

COMMISSION DELEGATED REGULATION (EU) No .../..

of [date]

supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards on transparency requirements for trading venues and investment firms with respect to bonds, structured finance products, emission allowances and derivatives

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments⁹⁰, and in particular Article 1(8), Article 9(5), Article 11(4) and Article 21(5) thereof,

Whereas:

(...)

HAS ADOPTED THIS REGULATION:

Article 1
Definitions

TITLE I
TRANSPARENCY FOR TRADING VENUES AND INVESTMENT FIRMS

CHAPTER 1
Pre-trade transparency for regulated markets, MTFs and OTFs

Article 2
Pre-trade transparency obligations

⁹⁰ OJ L 173, 12.6.2014, p.84.

[Article 9(5)(b) of Regulation (EU) No 600/2014]

Article 3

Waiver for large in scale orders

[Article 9(5)(c) of Regulation (EU) No 600/2014]

Article 4

Waiver for orders held in an order management facility

[Article 9(5)(c) of Regulation (EU) No 600/2014]

Article 5

Waiver for orders which are above the size specific to the financial instrument

[Article 9(5)(d) of Regulation (EU) No 600/2014]

Article 6

Waiver for financial instruments for which there is not a liquid market

[Article 9(5)(e) of Regulation (EU) No 600/2014]

CHAPTER 2

Post-trade transparency for regulated markets, MTFs, OTFs and investment firms

Article 7

Post-trade transparency obligations

[Article 11(4)(a) & (b) and Article 21(5) (a) & (c) of Regulation (EU) No 600/2014]

Article 8

Deferred publication of transactions

[Article 11(4)(c) of Regulation (EU) No 600/2014]

Article 9

Application of OTC post-trade transparency to certain transactions

[Article 21(5)(b) of Regulation (EU) No 600/2014]

Article 10

Transparency requirements in conjunction with deferred publication at the discretion of the CA

[Article 11(4)(d) of Regulation (EU) No 600/2014]

**CHAPTER 3
Provisions common to pre-trade and post-trade transparency**

Article 11

Size of orders that are large in scale compared with the normal market size, orders that are above the size specific to a financial instrument, relevant minimum large in scale size of transactions and size of the transactions that are above the size specific to a financial instrument

[Article 9(5) letters (c) and (d) and Article 11(4)(c) of Regulation (EU) No 600/2014]

Article 12

Transactions to which the exemption in Article 1(6) of Regulation (EU) No 600/2014 shall apply

[Article 1(6) of Regulation (EU) No 600/2014]

Article 13

Transactions to which of the exemption in Article 1(6) of Regulation (EU) No 600/2014 shall not apply

[Article 1(8) of Regulation (EU) No 600/2014]

Article 14

Temporary suspension of transparency obligations

[Article 9(5)(a) of Regulation (EU) No 600/2014]

Article 15

Entry into force

Annex I: Information to be made public in accordance with article 2

Table 1

Description of the type of system and the related information to be made public

Annex II: Details of transaction to be made available to the public

Table 1

List of details of public information under the post-trade transparency regime in respect of non-equity financial instruments

Table 2

Flags for post-trade transparency in respect of non-equity financial instruments

Table 3
Measure of volume

Type of instrument	Volume
Bonds and structured finance products	Total nominal value of debt instruments traded
Securitized derivatives	Number of units traded * price per unit
Interest rate derivatives	Notional amount of traded contracts
Foreign Exchange Derivatives	Notional amount of traded contracts
Equity derivatives	Number of contracts * contract size* strike (options) or future price (futures)
Commodity derivatives	Notional amount of traded contracts
Credit derivatives	Notional amount of traded contracts
Contract for differences	Notional amount of traded contracts
Other derivatives	Notional amount of traded contracts
Emission allowances	Tons of Carbon Dioxide

Annex III: Liquidity assessment, LIS and SSTI thresholds for non-equity financial instruments

Section 1

Bonds and structured finance products

Section 2

Securitised derivatives

Section 3

Contract types definitions

Section 4

Interest rate derivatives

Section 4

Equity derivatives

Section 5

Commodities derivatives

Section 6 **Foreign exchange derivatives**

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'Foreign exchange (FX) derivative' means a financial instrument relating to currencies as defined in Section C(4) of Annex I of Directive 2014/65/EU.
- (2) 'Spread betting' means a foreign exchange derivative involving taking two-way bets on the movement on assets.
- (3) 'Non-deliverable forward (NDF) liquid class' means a non-deliverable forward characterised by a specific combination of currency pair and tenor as specified in each row of Table 48 Non-deliverable forwards (NDF) – liquid classes.
- (4) 'Non-deliverable forward (NDF) not having a liquid market' means a non-deliverable forward which is not a non-deliverable forward liquid class.
- (5) 'Deliverable forward (DF) liquid class' means a deliverable forward characterised by a specific combination of currency pair and tenor as specified in each row of Table 50 deliverable forwards (DF) – liquid classes.
- (6) 'Deliverable forward (DF) not having a liquid market' means a deliverable forward which is not a deliverable forward liquid class.

Table 48
Non-deliverable forwards (NDF) – liquid classes

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
AUD-EUR	from 1 day	to 4 days	1,000,000	500,000
AUD-EUR	from 4 days	to 7 days	1,000,000	500,000
AUD-EUR	from 7 days	to 1 month	1,000,000	500,000
AUD-EUR	from 1 month	to 3 months	3,500,000	1,750,000
AUD-EUR	from 3 months	to 6 months	1,000,000	500,000
AUD-GBP	from 1 day	to 4 days	1,000,000	500,000
AUD-GBP	from 4 days	to 7 days	1,000,000	500,000
AUD-GBP	from 7 days	to 1 month	1,000,000	500,000
AUD-GBP	from 1 month	to 3 months	20,000,000	10,000,000
AUD-GBP	from 3 months	to 6 months	1,000,000	500,000
AUD-JPY	from 1 day	to 4 days	1,000,000	500,000
AUD-JPY	from 4 days	to 7 days	4,000,000	2,000,000
AUD-JPY	from 7 days	to 1 month	1,000,000	500,000
AUD-JPY	from 1 month	to 3 months	8,500,000	4,250,000
AUD-JPY	from 3 months	to 6 months	15,000,000	7,500,000
AUD-USD	from 1 day	to 4 days	1,000,000	500,000
AUD-USD	from 4 days	to 7 days	1,000,000	500,000
AUD-USD	from 7 days	to 1 month	1,000,000	500,000
AUD-USD	from 1 month	to 3 months	6,000,000	3,000,000
AUD-USD	from 3 months	to 6 months	1,000,000	500,000
BRL-USD	from 1 day	to 4 days	40,000,000	20,000,000
BRL-USD	from 4 days	to 7 days	40,000,000	20,000,000
BRL-USD	from 7 days	to 1 month	15,000,000	7,500,000
BRL-USD	from 1 month	to 3 months	15,000,000	7,500,000
BRL-USD	from 3 months	to 6 months	35,000,000	17,500,000
CAD-EUR	from 1 day	to 4 days	1,000,000	500,000
CAD-EUR	from 4 days	to 7 days	1,000,000	500,000
CAD-EUR	from 7 days	to 1 month	1,000,000	500,000
CAD-EUR	from 1 month	to 3 months	3,000,000	1,500,000
CAD-EUR	from 3 months	to 6 months	1,000,000	500,000
CAD-GBP	from 1 day	to 4 days	1,000,000	500,000
CAD-GBP	from 4 days	to 7 days	1,000,000	500,000
CAD-GBP	from 7 days	to 1 month	1,000,000	500,000
CAD-GBP	from 1 month	to 3 months	30,000,000	15,000,000
CAD-USD	from 1 day	to 4 days	1,000,000	500,000
CAD-USD	from 4 days	to 7 days	1,000,000	500,000
CAD-USD	from 7 days	to 1 month	1,000,000	500,000
CAD-USD	from 1 month	to 3 months	1,000,000	500,000
CAD-USD	from 3 months	to 6 months	1,000,000	500,000
CHF-EUR	from 1 day	to 4 days	1,000,000	500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
CHF-EUR	from 4 days	to 7 days	1,000,000	500,000
CHF-EUR	from 7 days	to 1 month	1,000,000	500,000
CHF-EUR	from 1 month	to 3 months	8,500,000	4,250,000
CHF-EUR	from 3 months	to 6 months	1,000,000	500,000
CHF-GBP	from 1 day	to 4 days	1,000,000	500,000
CHF-GBP	from 4 days	to 7 days	1,000,000	500,000
CHF-GBP	from 7 days	to 1 month	1,000,000	500,000
CHF-GBP	from 1 month	to 3 months	20,000,000	10,000,000
CHF-GBP	from 3 months	to 6 months	1,000,000	500,000
CHF-JPY	from 1 day	to 4 days	1,000,000	500,000
CHF-JPY	from 4 days	to 7 days	1,000,000	500,000
CHF-JPY	from 7 days	to 1 month	1,000,000	500,000
CHF-JPY	from 1 month	to 3 months	25,000,000	12,500,000
CHF-JPY	from 3 months	to 6 months	10,000,000	5,000,000
CHF-USD	from 1 day	to 4 days	1,000,000	500,000
CHF-USD	from 4 days	to 7 days	1,000,000	500,000
CHF-USD	from 7 days	to 1 month	1,000,000	500,000
CHF-USD	from 1 month	to 3 months	10,000,000	5,000,000
CHF-USD	from 3 months	to 6 months	1,000,000	500,000
CLP-USD	from 7 days	to 1 month	25,000,000	12,500,000
CLP-USD	from 1 month	to 3 months	20,000,000	10,000,000
CLP-USD	from 3 months	to 6 months	175,000,000	87,500,000
CNY-EUR	from 7 days	to 1 month	15,000,000	7,500,000
CNY-EUR	from 1 month	to 3 months	15,000,000	7,500,000
CNY-USD	from 1 day	to 4 days	1,000,000	500,000
CNY-USD	from 4 days	to 7 days	25,000,000	12,500,000
CNY-USD	from 7 days	to 1 month	30,000,000	15,000,000
CNY-USD	from 1 month	to 3 months	20,000,000	10,000,000
CNY-USD	from 3 months	to 6 months	30,000,000	15,000,000
CNY-USD	from 6 months	to 1 year	20,000,000	10,000,000
CNY-USD	from 1 year	to 2 years	20,000,000	10,000,000
COP-USD	from 1 day	to 4 days	175,000,000	87,500,000
COP-USD	from 4 days	to 7 days	700,000,000	350,000,000
COP-USD	from 7 days	to 1 month	70,000,000	35,000,000
COP-USD	from 1 month	to 3 months	70,000,000	35,000,000
CZK-EUR	from 7 days	to 1 month	15,000,000	7,500,000
CZK-EUR	from 1 month	to 3 months	15,000,000	7,500,000
CZK-EUR	from 3 months	to 6 months	1,500,000	750,000
DKK-EUR	from 1 day	to 4 days	7,500,000	3,750,000
DKK-EUR	from 4 days	to 7 days	7,500,000	3,750,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
DKK-EUR	from 7 days	to 1 month	15,000,000	7,500,000
DKK-EUR	from 1 month	to 3 months	100,000,000	50,000,000
DKK-EUR	from 3 months	to 6 months	90,000,000	45,000,000
DKK-GBP	from 4 days	to 7 days	20,000,000	10,000,000
DKK-GBP	from 7 days	to 1 month	25,000,000	12,500,000
DKK-GBP	from 1 month	to 3 months	25,000,000	12,500,000
DKK-USD	from 1 day	to 4 days	1,000,000	500,000
DKK-USD	from 4 days	to 7 days	70,000,000	35,000,000
DKK-USD	from 7 days	to 1 month	15,000,000	7,500,000
DKK-USD	from 1 month	to 3 months	15,000,000	7,500,000
DKK-USD	from 3 months	to 6 months	4,000,000	2,000,000
DKK-USD	from 6 months	to 1 year	20,000,000	10,000,000
EUR-GBP	from 1 day	to 4 days	1,000,000	500,000
EUR-GBP	from 4 days	to 7 days	1,000,000	500,000
EUR-GBP	from 7 days	to 1 month	1,000,000	500,000
EUR-GBP	from 1 month	to 3 months	20,000,000	10,000,000
EUR-GBP	from 3 months	to 6 months	1,000,000	500,000
EUR-GBP	from 6 months	to 1 year	1,000,000	500,000
EUR-GBP	from 1 year	to 2 years	7,000,000	3,500,000
EUR-GBP	from 2 years	to 3 years	35,000,000	17,500,000
EUR-HUF	from 1 day	to 4 days	1,000,000	500,000
EUR-HUF	from 4 days	to 7 days	15,000,000	7,500,000
EUR-HUF	from 7 days	to 1 month	15,000,000	7,500,000
EUR-HUF	from 1 month	to 3 months	30,000,000	15,000,000
EUR-HUF	from 3 months	to 6 months	75,000,000	37,500,000
EUR-HUF	from 6 months	to 1 year	15,000,000	7,500,000
EUR-JPY	from 1 day	to 4 days	1,000,000	500,000
EUR-JPY	from 4 days	to 7 days	3,000,000	1,500,000
EUR-JPY	from 7 days	to 1 month	1,000,000	500,000
EUR-JPY	from 1 month	to 3 months	10,000,000	5,000,000
EUR-JPY	from 3 months	to 6 months	20,000,000	10,000,000
EUR-NOK	from 1 day	to 4 days	8,000,000	4,000,000
EUR-NOK	from 4 days	to 7 days	8,000,000	4,000,000
EUR-NOK	from 7 days	to 1 month	2,000,000	1,000,000
EUR-NOK	from 1 month	to 3 months	5,000,000	2,500,000
EUR-NOK	from 3 months	to 6 months	3,500,000	1,750,000
EUR-PLN	from 1 day	to 4 days	4,000,000	2,000,000
EUR-PLN	from 4 days	to 7 days	4,500,000	2,250,000
EUR-PLN	from 7 days	to 1 month	5,500,000	2,750,000
EUR-PLN	from 1 month	to 3 months	7,000,000	3,500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
EUR-PLN	from 3 months	to 6 months	2,000,000	1,000,000
EUR-SEK	from 1 day	to 4 days	9,000,000	4,500,000
EUR-SEK	from 4 days	to 7 days	9,000,000	4,500,000
EUR-SEK	from 7 days	to 1 month	5,000,000	2,500,000
EUR-SEK	from 1 month	to 3 months	9,000,000	4,500,000
EUR-SEK	from 3 months	to 6 months	2,500,000	1,250,000
EUR-USD	from 1 day	to 4 days	1,000,000	500,000
EUR-USD	from 4 days	to 7 days	1,000,000	500,000
EUR-USD	from 7 days	to 1 month	1,000,000	500,000
EUR-USD	from 1 month	to 3 months	2,000,000	1,000,000
EUR-USD	from 3 months	to 6 months	1,000,000	500,000
EUR-USD	from 6 months	to 1 year	1,000,000	500,000
EUR-USD	from 1 year	to 2 years	4,000,000	2,000,000
EUR-USD	from 2 years	to 3 years	20,000,000	10,000,000
GBP-HKD	from 4 days	to 7 days	40,000,000	20,000,000
GBP-HKD	from 7 days	to 1 month	8,500,000	4,250,000
GBP-HKD	from 1 month	to 3 months	45,000,000	22,500,000
GBP-HUF	from 1 day	to 4 days	1,000,000	500,000
GBP-HUF	from 4 days	to 7 days	4,000,000	2,000,000
GBP-HUF	from 7 days	to 1 month	6,000,000	3,000,000
GBP-HUF	from 1 month	to 3 months	2,500,000	1,250,000
GBP-HUF	from 3 months	to 6 months	45,000,000	22,500,000
GBP-JPY	from 1 day	to 4 days	1,000,000	500,000
GBP-JPY	from 4 days	to 7 days	1,000,000	500,000
GBP-JPY	from 7 days	to 1 month	1,000,000	500,000
GBP-JPY	from 1 month	to 3 months	35,000,000	17,500,000
GBP-JPY	from 3 months	to 6 months	20,000,000	10,000,000
GBP-NOK	from 1 month	to 3 months	25,000,000	12,500,000
GBP-NOK	from 3 months	to 6 months	3,000,000	1,500,000
GBP-SEK	from 4 days	to 7 days	5,000,000	2,500,000
GBP-SEK	from 7 days	to 1 month	5,500,000	2,750,000
GBP-SEK	from 1 month	to 3 months	45,000,000	22,500,000
GBP-USD	from 1 day	to 4 days	1,000,000	500,000
GBP-USD	from 4 days	to 7 days	1,000,000	500,000
GBP-USD	from 7 days	to 1 month	1,000,000	500,000
GBP-USD	from 1 month	to 3 months	15,000,000	7,500,000
GBP-USD	from 3 months	to 6 months	1,000,000	500,000
GBP-USD	from 6 months	to 1 year	1,000,000	500,000
HUF-USD	from 1 day	to 4 days	1,000,000	500,000
HUF-USD	from 4 days	to 7 days	225,000,000	112,500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
HUF-USD	from 7 days	to 1 month	30,000,000	15,000,000
HUF-USD	from 1 month	to 3 months	40,000,000	20,000,000
HUF-USD	from 3 months	to 6 months	40,000,000	20,000,000
IDR-USD	from 1 day	to 4 days	20,000,000	10,000,000
IDR-USD	from 4 days	to 7 days	15,000,000	7,500,000
IDR-USD	from 7 days	to 1 month	350,000,000	175,000,000
IDR-USD	from 1 month	to 3 months	10,000,000	5,000,000
IDR-USD	from 3 months	to 6 months	10,000,000	5,000,000
INR-USD	from 1 day	to 4 days	15,000,000	7,500,000
INR-USD	from 4 days	to 7 days	25,000,000	12,500,000
INR-USD	from 7 days	to 1 month	15,000,000	7,500,000
INR-USD	from 1 month	to 3 months	7,500,000	3,750,000
INR-USD	from 3 months	to 6 months	20,000,000	10,000,000
INR-USD	from 6 months	to 1 year	40,000,000	20,000,000
INR-USD	from 1 year	to 2 years	20,000,000	10,000,000
JPY-NZD	from 1 day	to 4 days	1,000,000	500,000
JPY-NZD	from 4 days	to 7 days	2,500,000	1,250,000
JPY-NZD	from 7 days	to 1 month	1,000,000	500,000
JPY-NZD	from 1 month	to 3 months	8,000,000	4,000,000
JPY-NZD	from 3 months	to 6 months	3,000,000	1,500,000
JPY-USD	from 1 day	to 4 days	1,000,000	500,000
JPY-USD	from 4 days	to 7 days	6,000,000	3,000,000
JPY-USD	from 7 days	to 1 month	1,000,000	500,000
JPY-USD	from 1 month	to 3 months	20,000,000	10,000,000
JPY-USD	from 3 months	to 6 months	30,000,000	15,000,000
KRW-USD	from 1 day	to 4 days	75,000,000	37,500,000
KRW-USD	from 4 days	to 7 days	55,000,000	27,500,000
KRW-USD	from 7 days	to 1 month	35,000,000	17,500,000
KRW-USD	from 1 month	to 3 months	20,000,000	10,000,000
KRW-USD	from 3 months	to 6 months	575,000,000	287,500,000
MXN-USD	from 1 day	to 4 days	2,000,000	1,000,000
MXN-USD	from 4 days	to 7 days	9,500,000	4,750,000
MXN-USD	from 7 days	to 1 month	2,500,000	1,250,000
MXN-USD	from 1 month	to 3 months	6,500,000	3,250,000
MXN-USD	from 3 months	to 6 months	2,000,000	1,000,000
MYR-USD	from 1 day	to 4 days	15,000,000	7,500,000
MYR-USD	from 4 days	to 7 days	30,000,000	15,000,000
MYR-USD	from 7 days	to 1 month	20,000,000	10,000,000
MYR-USD	from 1 month	to 3 months	15,000,000	7,500,000
NOK-USD	from 1 day	to 4 days	1,000,000	500,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
NOK-USD	from 4 days	to 7 days	15,000,000	7,500,000
NOK-USD	from 7 days	to 1 month	3,500,000	1,750,000
NOK-USD	from 1 month	to 3 months	225,000,000	112,500,000
NOK-USD	from 3 months	to 6 months	2,000,000	1,000,000
NZD-USD	from 1 day	to 4 days	1,000,000	500,000
NZD-USD	from 4 days	to 7 days	1,000,000	500,000
NZD-USD	from 7 days	to 1 month	1,000,000	500,000
NZD-USD	from 1 month	to 3 months	1,000,000	500,000
NZD-USD	from 3 months	to 6 months	1,000,000	500,000
PHP-USD	from 1 day	to 4 days	10,000,000	5,000,000
PHP-USD	from 4 days	to 7 days	10,000,000	5,000,000
PHP-USD	from 7 days	to 1 month	15,000,000	7,500,000
PHP-USD	from 1 month	to 3 months	8,000,000	4,000,000
RUB-USD	from 1 day	to 4 days	1,000,000	500,000
RUB-USD	from 4 days	to 7 days	25,000,000	12,500,000
RUB-USD	from 7 days	to 1 month	3,500,000	1,750,000
RUB-USD	from 1 month	to 3 months	15,000,000	7,500,000
RUB-USD	from 3 months	to 6 months	10,000,000	5,000,000
SEK-USD	from 1 day	to 4 days	1,000,000	500,000
SEK-USD	from 4 days	to 7 days	15,000,000	7,500,000
SEK-USD	from 7 days	to 1 month	8,000,000	4,000,000
SEK-USD	from 1 month	to 3 months	9,500,000	4,750,000
SEK-USD	from 3 months	to 6 months	1,000,000	500,000
TRY-USD	from 1 day	to 4 days	1,500,000	750,000
TRY-USD	from 4 days	to 7 days	1,000,000	500,000
TRY-USD	from 7 days	to 1 month	1,000,000	500,000
TRY-USD	from 1 month	to 3 months	6,500,000	3,250,000
TRY-USD	from 3 months	to 6 months	1,000,000	500,000
TWD-USD	from 1 day	to 4 days	15,000,000	7,500,000
TWD-USD	from 4 days	to 7 days	20,000,000	10,000,000
TWD-USD	from 7 days	to 1 month	20,000,000	10,000,000
TWD-USD	from 1 month	to 3 months	15,000,000	7,500,000
TWD-USD	from 3 months	to 6 months	35,000,000	17,500,000
USD-XAU	from 1 day	to 4 days	1,000,000	500,000
USD-XAU	from 4 days	to 7 days	1,000,000	500,000
USD-XAU	from 7 days	to 1 month	1,000,000	500,000
USD-XAU	from 1 month	to 3 months	125,000,000	62,500,000
USD-XAU	from 3 months	to 6 months	125,000,000	62,500,000
USD-XAU	from 6 months	to 1 year	1,000,000	500,000
USD-ZAR	from 1 day	to 4 days	8,000,000	4,000,000

NON-DELIVERABLE FORWARDS (NDF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
USD-ZAR	from 4 days	to 7 days	8,000,000	4,000,000
USD-ZAR	from 7 days	to 1 month	1,000,000	500,000
USD-ZAR	from 1 month	to 3 months	9,000,000	4,500,000
USD-ZAR	from 3 months	to 6 months	2,000,000	1,000,000

Table 49
Non-deliverable forwards (NDF) – classes not having a liquid market

NON-DELIVERABLE FORWARDS (NDF) - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	1,000,000	500,000

Table 50
Deliverable forwards (DF) – liquid classes

DELIVERABLE FORWARDS (DF) - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
CAD-USD	from 7 days	to 1 month	6,000,000	3,000,000
CAD-USD	from 1 month	to 3 months	2,500,000	1,250,000
CHF-EUR	from 1 day	to 4 days	20,000,000	10,000,000
CHF-EUR	from 4 days	to 7 days	5,500,000	2,750,000
CHF-EUR	from 7 days	to 1 month	8,500,000	4,250,000
CHF-EUR	from 1 month	to 3 months	10,000,000	5,000,000
CHF-EUR	from 3 months	to 6 months	15,000,000	7,500,000
CHF-USD	from 1 day	to 4 days	15,000,000	7,500,000
CHF-USD	from 4 days	to 7 days	4,500,000	2,250,000
CHF-USD	from 7 days	to 1 month	4,500,000	2,250,000
CHF-USD	from 1 month	to 3 months	10,000,000	5,000,000
CNH-USD	from 7 days	to 1 month	25,000,000	12,500,000
CNH-USD	from 1 month	to 3 months	40,000,000	20,000,000
DKK-EUR	from 7 days	to 1 month	3,000,000	1,500,000
DKK-EUR	from 1 month	to 3 months	4,500,000	2,250,000
EUR-GBP	from 1 day	to 4 days	30,000,000	15,000,000
EUR-GBP	from 4 days	to 7 days	7,000,000	3,500,000
EUR-GBP	from 7 days	to 1 month	9,000,000	4,500,000
EUR-GBP	from 1 month	to 3 months	10,000,000	5,000,000
EUR-GBP	from 3 months	to 6 months	25,000,000	12,500,000
EUR-GBP	from 6 months	to 1 year	8,500,000	4,250,000
EUR-JPY	from 1 day	to 4 days	6,500,000	3,250,000
EUR-JPY	from 4 days	to 7 days	5,000,000	2,500,000
EUR-JPY	from 7 days	to 1 month	5,500,000	2,750,000
EUR-JPY	from 1 month	to 3 months	4,500,000	2,250,000
EUR-JPY	from 3 months	to 6 months	6,000,000	3,000,000
EUR-NOK	from 4 days	to 7 days	5,000,000	2,500,000
EUR-NOK	from 7 days	to 1 month	6,500,000	3,250,000
EUR-NOK	from 1 month	to 3 months	1,000,000	500,000
EUR-PLN	from 7 days	to 1 month	7,000,000	3,500,000
EUR-PLN	from 1 month	to 3 months	2,500,000	1,250,000
EUR-RUB	from 1 day	to 4 days	15,000,000	7,500,000
EUR-RUB	from 4 days	to 7 days	15,000,000	7,500,000
EUR-RUB	from 7 days	to 1 month	7,000,000	3,500,000
EUR-RUB	from 1 month	to 3 months	3,000,000	1,500,000
EUR-SEK	from 1 day	to 4 days	50,000,000	25,000,000
EUR-SEK	from 4 days	to 7 days	5,000,000	2,500,000
EUR-SEK	from 7 days	to 1 month	5,500,000	2,750,000
EUR-SEK	from 1 month	to 3 months	4,000,000	2,000,000
EUR-SEK	from 3 months	to 6 months	4,000,000	2,000,000

DELIVERABLE FORWARDS (DF) - LIQUID CLASSES			
CURRENCY PAIR	TENOR	LIS (€)	SSTI (€)
EUR-SEK	from 6 months to 1 year	3,000,000	1,500,000
EUR-USD	from 1 day to 4 days	10,000,000	5,000,000
EUR-USD	from 4 days to 7 days	10,000,000	5,000,000
EUR-USD	from 7 days to 1 month	6,500,000	3,250,000
EUR-USD	from 1 month to 3 months	7,500,000	3,750,000
EUR-USD	from 3 months to 6 months	4,500,000	2,250,000
EUR-USD	from 6 months to 1 year	3,000,000	1,500,000
EUR-USD	from 1 year to 2 years	5,000,000	2,500,000
EUR-USD	from 2 years to 3 years	20,000,000	10,000,000
GBP-USD	from 1 day to 4 days	7,000,000	3,500,000
GBP-USD	from 4 days to 7 days	6,000,000	3,000,000
GBP-USD	from 7 days to 1 month	15,000,000	7,500,000
GBP-USD	from 1 month to 3 months	15,000,000	7,500,000
GBP-USD	from 3 months to 6 months	75,000,000	37,500,000
GBP-USD	from 6 months to 1 year	20,000,000	10,000,000
INR-USD	from 7 days to 1 month	1,000,000	500,000
INR-USD	from 1 month to 3 months	1,000,000	500,000
JPY-USD	from 1 day to 4 days	10,000,000	5,000,000
JPY-USD	from 4 days to 7 days	7,500,000	3,750,000
JPY-USD	from 7 days to 1 month	10,000,000	5,000,000
JPY-USD	from 1 month to 3 months	7,000,000	3,500,000
JPY-USD	from 3 months to 6 months	3,500,000	1,750,000
JPY-USD	from 6 months to 1 year	75,000,000	37,500,000
JPY-USD	from 1 year to 2 years	85,000,000	42,500,000
NOK-SEK	from 7 days to 1 month	10,000,000	5,000,000
NOK-SEK	from 1 month to 3 months	6,500,000	3,250,000
NOK-USD	from 7 days to 1 month	15,000,000	7,500,000
NOK-USD	from 1 month to 3 months	5,500,000	2,750,000
SEK-USD	from 1 day to 4 days	7,500,000	3,750,000
SEK-USD	from 4 days to 7 days	5,500,000	2,750,000
SEK-USD	from 7 days to 1 month	8,500,000	4,250,000
SEK-USD	from 1 month to 3 months	6,500,000	3,250,000
SEK-USD	from 3 months to 6 months	9,500,000	4,750,000
SEK-USD	from 6 months to 1 year	6,000,000	3,000,000

Table 51
Deliverable forwards (DF) – classes not having a liquid market

DELIVERABLE FORWARDS (DF) - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	1,000,000	500,000

- (1) 'FX option liquid class' means an FX option characterised by a specific combination of currency pair and tenor as specified in each row of Table 52 FX options – liquid classes.
- (2) 'FX option not having a liquid market' means an FX option which is not an FX option liquid class.

Table 52
FX options – liquid classes

FX OPTIONS - LIQUID CLASSES						
CURRENCY PAIR	TENOR			LIS (€)	SSTI (€)	
AUD-USD	from	7 days	to	1 month	20,000,000	10,000,000
AUD-USD	from	1 month	to	3 months	35,000,000	17,500,000
EUR-USD	from	1 day	to	4 days	60,000,000	30,000,000
EUR-USD	from	4 days	to	7 days	70,000,000	35,000,000
EUR-USD	from	7 days	to	1 month	50,000,000	25,000,000
EUR-USD	from	1 month	to	3 months	50,000,000	25,000,000
EUR-USD	from	3 months	to	6 months	50,000,000	25,000,000
EUR-USD	from	6 months	to	1 year	50,000,000	25,000,000
EUR-USD	from	1 year	to	2 years	50,000,000	25,000,000
GBP-USD	from	7 days	to	1 month	35,000,000	17,500,000
GBP-USD	from	1 month	to	3 months	35,000,000	17,500,000
USD-CAD	from	7 days	to	1 month	35,000,000	17,500,000
USD-CAD	from	1 month	to	3 months	55,000,000	27,500,000
USD-CAD	from	3 months	to	6 months	40,000,000	20,000,000
USD-CAD	from	6 months	to	1 year	50,000,000	25,000,000
USD-CNY	from	7 days	to	1 month	100,000,000	50,000,000
USD-CNY	from	1 month	to	3 months	125,000,000	62,500,000
USD-CNY	from	3 months	to	6 months	100,000,000	50,000,000
USD-CNY	from	6 months	to	1 year	100,000,000	50,000,000
USD-CNY	from	1 year	to	2 years	100,000,000	50,000,000
USD-CNY	from	2 years	to	3 years	150,000,000	75,000,000
USD-JPY	from	1 day	to	4 days	60,000,000	30,000,000
USD-JPY	from	4 days	to	7 days	70,000,000	35,000,000
USD-JPY	from	7 days	to	1 month	70,000,000	35,000,000
USD-JPY	from	1 month	to	3 months	75,000,000	37,500,000
USD-JPY	from	3 months	to	6 months	75,000,000	37,500,000
USD-JPY	from	6 months	to	1 year	55,000,000	27,500,000
USD-JPY	from	1 year	to	2 years	50,000,000	25,000,000
USD-JPY	from	2 years	to	3 years	60,000,000	30,000,000

Table 53
FX options – classes not having a liquid market

FX OPTIONS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	10,000,000	5,000,000

- (1) 'FX swap liquid class' means an FX swap characterised by a specific combination of currency pair and tenor as specified in each row of Table 54 FX swaps – liquid classes.
- (2) 'FX swap not having a liquid market' means an FX swap which is not an FX swap liquid class.

Table 54
FX swaps – liquid classes

FX SWAPS - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
AUD-USD	from 1 day	to 4 days	85,000,000	42,500,000
AUD-USD	from 4 days	to 7 days	10,000,000	5,000,000
AUD-USD	from 7 days	to 1 month	15,000,000	7,500,000
AUD-USD	from 1 month	to 3 months	7,500,000	3,750,000
AUD-USD	from 3 months	to 6 months	5,000,000	2,500,000
EUR-CHF	from 1 day	to 4 days	50,000,000	25,000,000
EUR-CHF	from 4 days	to 7 days	15,000,000	7,500,000
EUR-CHF	from 7 days	to 1 month	40,000,000	20,000,000
EUR-CHF	from 1 month	to 3 months	40,000,000	20,000,000
EUR-GBP	from 1 day	to 4 days	35,000,000	17,500,000
EUR-GBP	from 4 days	to 7 days	15,000,000	7,500,000
EUR-GBP	from 7 days	to 1 month	15,000,000	7,500,000
EUR-GBP	from 1 month	to 3 months	20,000,000	10,000,000
EUR-GBP	from 3 months	to 6 months	35,000,000	17,500,000
EUR-HUF	from 1 day	to 4 days	15,000,000	7,500,000
EUR-HUF	from 4 days	to 7 days	15,000,000	7,500,000
EUR-HUF	from 7 days	to 1 month	15,000,000	7,500,000
EUR-HUF	from 1 month	to 3 months	25,000,000	12,500,000
EUR-JPY	from 1 day	to 4 days	50,000,000	25,000,000
EUR-JPY	from 4 days	to 7 days	20,000,000	10,000,000
EUR-JPY	from 7 days	to 1 month	15,000,000	7,500,000
EUR-JPY	from 1 month	to 3 months	15,000,000	7,500,000
EUR-SEK	from 1 day	to 4 days	35,000,000	17,500,000
EUR-SEK	from 4 days	to 7 days	25,000,000	12,500,000
EUR-SEK	from 7 days	to 1 month	15,000,000	7,500,000
EUR-SEK	from 1 month	to 3 months	15,000,000	7,500,000
EUR-SEK	from 3 months	to 6 months	45,000,000	22,500,000
EUR-USD	from 1 day	to 4 days	125,000,000	62,500,000
EUR-USD	from 4 days	to 7 days	20,000,000	10,000,000
EUR-USD	from 7 days	to 1 month	25,000,000	12,500,000

FX SWAPS - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
EUR-USD	from 1 month	to 3 months	30,000,000	15,000,000
EUR-USD	from 3 months	to 6 months	25,000,000	12,500,000
EUR-USD	from 6 months	to 1 year	15,000,000	7,500,000
GBP-USD	from 1 day	to 4 days	90,000,000	45,000,000
GBP-USD	from 4 days	to 7 days	15,000,000	7,500,000
GBP-USD	from 7 days	to 1 month	20,000,000	10,000,000
GBP-USD	from 1 month	to 3 months	20,000,000	10,000,000
GBP-USD	from 3 months	to 6 months	10,000,000	5,000,000
USD-CAD	from 1 day	to 4 days	25,000,000	12,500,000
USD-CAD	from 4 days	to 7 days	2,000,000	1,000,000
USD-CAD	from 7 days	to 1 month	15,000,000	7,500,000
USD-CAD	from 1 month	to 3 months	15,000,000	7,500,000
USD-CAD	from 3 months	to 6 months	6,500,000	3,250,000
USD-CHF	from 1 day	to 4 days	125,000,000	62,500,000
USD-CHF	from 4 days	to 7 days	20,000,000	10,000,000
USD-CHF	from 7 days	to 1 month	20,000,000	10,000,000
USD-CHF	from 1 month	to 3 months	40,000,000	20,000,000
USD-CHF	from 3 months	to 6 months	25,000,000	12,500,000
USD-CNY	from 1 day	to 4 days	60,000,000	30,000,000
USD-CNY	from 4 days	to 7 days	40,000,000	20,000,000
USD-CNY	from 7 days	to 1 month	45,000,000	22,500,000
USD-CNY	from 1 month	to 3 months	35,000,000	17,500,000
USD-CNY	from 3 months	to 6 months	35,000,000	17,500,000
USD-CNY	from 6 months	to 1 year	35,000,000	17,500,000
USD-CNY	from 1 year	to 2 years	35,000,000	17,500,000
USD-DKK	from 1 day	to 4 days	125,000,000	62,500,000
USD-DKK	from 4 days	to 7 days	55,000,000	27,500,000
USD-DKK	from 7 days	to 1 month	70,000,000	35,000,000
USD-HUF	from 1 day	to 4 days	50,000,000	25,000,000
USD-HUF	from 4 days	to 7 days	30,000,000	15,000,000
USD-HUF	from 7 days	to 1 month	35,000,000	17,500,000
USD-HUF	from 1 month	to 3 months	30,000,000	15,000,000
USD-JPY	from 1 day	to 4 days	150,000,000	75,000,000
USD-JPY	from 4 days	to 7 days	60,000,000	30,000,000
USD-JPY	from 7 days	to 1 month	20,000,000	10,000,000
USD-JPY	from 1 month	to 3 months	20,000,000	10,000,000
USD-JPY	from 3 months	to 6 months	15,000,000	7,500,000
USD-NOK	from 1 day	to 4 days	125,000,000	62,500,000
USD-NOK	from 4 days	to 7 days	60,000,000	30,000,000
USD-NOK	from 7 days	to 1 month	15,000,000	7,500,000

FX SWAPS - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
USD-NOK	from 1 month	to 3 months	10,000,000	5,000,000
USD-NOK	from 3 months	to 6 months	4,500,000	2,250,000
USD-SEK	from 1 day	to 4 days	125,000,000	62,500,000
USD-SEK	from 4 days	to 7 days	35,000,000	17,500,000
USD-SEK	from 7 days	to 1 month	30,000,000	15,000,000
USD-SEK	from 1 month	to 3 months	25,000,000	12,500,000
USD-SEK	from 3 months	to 6 months	15,000,000	7,500,000
USD-TRY	from 1 day	to 4 days	50,000,000	25,000,000
USD-TRY	from 4 days	to 7 days	15,000,000	7,500,000
USD-TRY	from 7 days	to 1 month	25,000,000	12,500,000

Table 55
FX swaps – classes not having a liquid market

FX SWAPS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	2,500,000	1,250,000

- (1) ‘Spread betting liquid class’ means a spread betting contract characterised by a specific combination of currency pair and tenor as specified in each row of Table 56 Spread betting – liquid classes.
- (2) ‘Spread betting not having a liquid market’ means a spread betting contract which is not a spread betting liquid class.

Table 56
Spread betting – liquid classes

SPREAD BETTING - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
AUD-CAD	from 1 day	to 4 days	1,000,000	500,000
AUD-JPY	from 1 day	to 4 days	3,000,000	1,500,000
AUD-NZD	from 1 day	to 4 days	1,000,000	500,000
AUD-USD	from 1 day	to 4 days	1,000,000	500,000
CAD-JPY	from 1 day	to 4 days	2,000,000	1,000,000
CHF-JPY	from 1 day	to 4 days	3,000,000	1,500,000
EUR-AUD	from 1 day	to 4 days	1,000,000	500,000
EUR-CAD	from 1 day	to 4 days	1,000,000	500,000
EUR-CHF	from 1 day	to 4 days	1,000,000	500,000
EUR-GBP	from 1 day	to 4 days	1,000,000	500,000
EUR-HUF	from 1 day	to 4 days	30,000,000	15,000,000
EUR-JPY	from 1 day	to 4 days	7,000,000	3,500,000
EUR-NOK	from 1 day	to 4 days	1,000,000	500,000
EUR-NZD	from 1 day	to 4 days	1,000,000	500,000
EUR-SEK	from 1 day	to 4 days	1,000,000	500,000
EUR-TRY	from 1 day	to 4 days	1,000,000	500,000
EUR-USD	from 1 day	to 4 days	1,000,000	500,000
GBP-AUD	from 1 day	to 4 days	1,000,000	500,000
GBP-CAD	from 1 day	to 4 days	1,000,000	500,000
GBP-CHF	from 1 day	to 4 days	1,000,000	500,000
GBP-JPY	from 1 day	to 4 days	6,500,000	3,250,000
GBP-NZD	from 1 day	to 4 days	1,000,000	500,000
GBP-SEK	from 1 day	to 4 days	1,000,000	500,000
GBP-USD	from 1 day	to 4 days	1,000,000	500,000
JPY-NZD	from 1 day	to 4 days	1,500,000	750,000
USD-CAD	from 1 day	to 4 days	1,000,000	500,000
USD-CHF	from 1 day	to 4 days	1,000,000	500,000
USD-CNY	from 1 day	to 4 days	1,000,000	500,000
USD-DKK	from 1 day	to 4 days	1,000,000	500,000
USD-HKD	from 1 day	to 4 days	1,000,000	500,000

SPREAD BETTING - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
USD-JPY	from 1 day	to 4 days	3,500,000	1,750,000
USD-MXN	from 1 day	to 4 days	1,000,000	500,000
USD-NZD	from 1 day	to 4 days	1,000,000	500,000
USD-RUB	from 1 day	to 4 days	1,000,000	500,000
USD-SEK	from 1 day	to 4 days	1,000,000	500,000
USD-TRY	from 1 day	to 4 days	1,000,000	500,000
USD-ZAR	from 1 day	to 4 days	1,000,000	500,000

Table 57
Spread betting – classes not having a liquid market

SPREAD BETTING - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	1,000,000	500,000

- (1) 'FX future liquid class' means an FX future contract characterised by a specific combination of currency pair and tenor as specified in each row of Table 58 FX futures – liquid classes.
- (2) 'FX future not having a liquid market' means an FX future contract which is not an FX future liquid class.

Table 58
FX futures – liquid classes

FX FUTURES - LIQUID CLASSES				
CURRENCY PAIR	TENOR		LIS (€)	SSTI (€)
EUR-USD	from 7 days	to 1 month	100,000	50,000
EUR-USD	from 1 month	to 3 months	100,000	50,000
EUR-USD	from 3 months	to 6 months	100,000	50,000
EUR-USD	from 6 months	to 1 year	100,000	50,000
EUR-USD	from 1 year	to 2 years	100,000	50,000

Table 59
FX futures – classes not having a liquid market

FX FUTURES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	100,000	50,000

Section 7

Credit derivatives

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'CDS' or 'credit default swap' means a swap whose exchange of cash flows is linked to the creditworthiness of one (single name) or several (index or bespoke basket) issuers of financial instruments and the occurrence of credit events.
- (2) 'On-the-run status' means the period beginning 5 days before the date on which the composition of the index is effective and ending 30 days after the date on which the composition of the next version of the index is effective.
- (3) 'CDS index liquid class' means a CDS index characterised by a specific combination of CDS index, tenor, currency in which the notional amount of the contract is denominated and on-the-run status of the CDS index as specified in each row of Table 60 CDS index – liquid classes.
- (4) 'CDS index not having a liquid market' means a CDS index which is not a CDS index liquid class.

Table 60
CDS Index– liquid classes

CDS INDEX - LIQUID CLASSES								
CDS INDEX	TENOR		CURRENCY	ON-THE-RUN STATUS	LIS (€)	SSTI (€)		
iTraxx Europe	from 1 year	to 2 years	EUR	Y	950,000,000	475,000,000		
iTraxx Europe	from 2 years	to 3 years	EUR	Y	900,000,000	450,000,000		
iTraxx Europe	from 3 years	to 4 years	EUR	Y	1,350,000,000	675,000,000		
iTraxx Europe	from 4 years	to 5 years	EUR	Y	250,000,000	125,000,000		
iTraxx Europe	from 5 years	to 6 years	EUR	Y	100,000,000	50,000,000		
iTraxx Europe	from 8 years	to 9 years	EUR	Y	375,000,000	187,500,000		
iTraxx Europe	from 9 years	to 10 years	EUR	Y	175,000,000	87,500,000		
iTraxx Europe	from 10 years	to 11 years	EUR	Y	350,000,000	175,000,000		
CDX.NA.IG	from 2 years	to 3 years	USD	Y	1,650,000,000	825,000,000		
CDX.NA.IG	from 3 years	to 4 years	USD	Y	850,000,000	425,000,000		
CDX.NA.IG	from 4 years	to 5 years	USD	Y	300,000,000	150,000,000		
CDX.NA.IG	from 5 years	to 6 years	USD	Y	325,000,000	162,500,000		
iTraxx Europe Crossover	from 2 years	to 3 years	EUR	Y	250,000,000	125,000,000		
iTraxx Europe Crossover	from 3 years	to 4 years	EUR	Y	450,000,000	225,000,000		
iTraxx Europe Crossover	from 4 years	to 5 years	EUR	Y	50,000,000	25,000,000		
iTraxx Europe Crossover	from 5 years	to 6 years	EUR	Y	25,000,000	12,500,000		
iTraxx Europe Senior Financials	from 1 year	to 2 years	EUR	Y	525,000,000	262,500,000		
iTraxx Europe Senior Financials	from 2 years	to 3 years	EUR	Y	500,000,000	250,000,000		
iTraxx Europe Senior Financials	from 3 years	to 4 years	EUR	Y	475,000,000	237,500,000		
iTraxx Europe Senior Financials	from 4 years	to 5 years	EUR	Y	425,000,000	212,500,000		
iTraxx Europe Senior Financials	from 5 years	to 6 years	EUR	Y	100,000,000	50,000,000		
CDX.NA.HY	from 3 years	to 4 years	USD	Y	375,000,000	187,500,000		
CDX.NA.HY	from 4 years	to 5 years	USD	Y	100,000,000	50,000,000		
CDX.NA.HY	from 5 years	to 6 years	USD	Y	200,000,000	100,000,000		
CDX.EM	from 4 years	to 5 years	USD	Y	50,000,000	25,000,000		
CDX.EM	from 5 years	to 6 years	USD	Y	25,000,000	12,500,000		

Table 61
CDS Index – classes not having a liquid market

CDS INDEX - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	100,000,000	50,000,000

- (1) 'Single name CDS liquid class' means a single name CDS characterised by a specific combination of underlying issuer type, tenor and currency in which the notional amount of the contract is denominated as specified in each row of Table 62 Single name CDS – liquid classes.
- (2) 'Single name CDS not having a liquid market' means a single name CDS which is not a single name CDS liquid class.
- (3) 'Issuer of sovereign type' means an issuer entity which is either:
 - (a) The Union;
 - (b) A Member State;
 - (c) A government department, an agency or a special purpose vehicle of the Member State;
 - (d) In the case of a Federal Member State, a member of the federation;
 - (e) A special purpose vehicle for several Member States;
 - (f) An international financial institution established by two or more Member States which has the purpose of mobilising funding and providing financial assistance to the benefit of its members that are experiencing or are threatened by severe financial problems;
 - (g) The European Investment Bank; or
 - (h) any sovereign entity which is not listed under article Article 4(1)(60) of Directive 2014/65/EU.
- (4) 'Issuer of corporate type' means an issuer entity which is not an issuer of sovereign type.

Table 62
Single name CDS– liquid classes

SINGLE NAME CDS - LIQUID CLASSES				LIS (€)	SSTI (€)
ISSUER TYPE	TENOR	CURRENCY			
Issuer of Corporate type	from 1 day to 1 year	USD		25,000,000	12,500,000
Issuer of Corporate type	from 1 year to 2 years	USD		20,000,000	10,000,000
Issuer of Corporate type	from 2 years to 3 years	USD		20,000,000	10,000,000
Issuer of Corporate type	from 3 years to 4 years	USD		20,000,000	10,000,000
Issuer of Corporate type	from 4 years to 5 years	USD		20,000,000	10,000,000
Issuer of Corporate type	from 5 years to 6 years	USD		15,000,000	7,500,000
Issuer of Corporate type	from 1 day to 1 year	EUR		25,000,000	12,500,000
Issuer of Corporate type	from 1 year to 2 years	EUR		20,000,000	10,000,000
Issuer of Corporate type	from 2 years to 3 years	EUR		20,000,000	10,000,000
Issuer of Corporate type	from 3 years to 4 years	EUR		20,000,000	10,000,000
Issuer of Corporate type	from 4 years to 5 years	EUR		20,000,000	10,000,000
Issuer of Corporate type	from 5 years to 6 years	EUR		15,000,000	7,500,000
Issuer of Sovereign type	from 1 day to 1 year	USD		75,000,000	37,500,000
Issuer of Sovereign type	from 1 year to 2 years	USD		75,000,000	37,500,000
Issuer of Sovereign type	from 2 years to 3 years	USD		70,000,000	35,000,000
Issuer of Sovereign type	from 3 years to 4 years	USD		70,000,000	35,000,000
Issuer of Sovereign type	from 4 years to 5 years	USD		85,000,000	42,500,000
Issuer of Sovereign type	from 5 years to 6 years	USD		35,000,000	17,500,000

Table 63
Single name CDS– classes not having a liquid market

SINGLE NAME CDS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	10,000,000	5,000,000

Table 64
Bespoke basket CDS – classes not having a liquid market

BESPOKE BASKET CDS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	10,000,000	5,000,000

- (1) 'CDS index option' means an option whose underlying is a CDS index.
- (2) 'CDS index options liquid class' means a CDS index option characterised by a specific combination of underlying CDS index, tenor, currency in which the notional amount of the contract is denominated and on-the-run status of the CDS index as specified in each row of Table 65 CDS index options – liquid classes.
- (3) 'CDS index options not having a liquid market' means a CDS index option which is not a CDS index option liquid class.
- (4) 'Single name CDS option' means an option whose underlying is a single name CDS.

Table 65
CDS index options – liquid classes

CDS INDEX OPTIONS - LIQUID CLASSES						
UNDERLYING CDS INDEX	TENOR	CURRENCY	ON-THE-RUN STATUS	LIS (€)	SSTI (€)	
iTraxx Europe	from 4 years to 5 years	EUR	Y	250,000,000	125,000,000	
iTraxx Europe	from 5 years to 6 years	EUR	Y	250,000,000	125,000,000	
CDX.NA.IG	from 4 years to 5 years	USD	Y	375,000,000	187,500,000	
CDX.NA.IG	from 5 years to 6 years	USD	Y	375,000,000	187,500,000	
CDX.NA.HY	from 4 years to 5 years	USD	Y	175,000,000	87,500,000	
CDX.NA.HY	from 5 years to 6 years	USD	Y	100,000,000	50,000,000	
iTraxx Europe Crossover	from 4 years to 5 years	EUR	Y	100,000,000	50,000,000	
iTraxx Europe Crossover	from 5 years to 6 years	EUR	Y	100,000,000	50,000,000	
iTraxx Europe Senior Financials	from 4 years to 5 years	EUR	Y	200,000,000	100,000,000	
iTraxx Europe Senior Financials	from 5 years to 6 years	EUR	Y	200,000,000	100,000,000	

Table 66
CDS index options – classes not having a liquid market

CDS INDEX OPTIONS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	25,000,000	12,500,000

Table 67
Single name CDS options – classes not having a liquid market

SINGLE NAME CDS OPTIONS - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
OTHERS	10,000,000	5,000,000

Section 8
Other derivatives

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'Freight derivative' means a financial instrument relating to freight rates as defined in Section C(10) of Annex I of Directive 2014/65/EU.
- (2) 'Emissions derivative' means a financial instrument relating to emission allowances as defined in Section C(4) of Annex I of Directive 2014/65/EU.
- (3) 'Weather derivative' means a financial instrument relating to climatic variables as defined in Section C(10) of Annex I of Directive 2014/65/EU.
- (4) 'Others' means a financial instrument as defined in Section C(10) of Annex I of Directive 2014/65/EU which is not a 'Freight derivative' or a 'Weather derivative'.

Table 68
Other derivatives – classes not having a liquid market

OTHER DERIVATIVES - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
Freight Derivatives	100,000	50,000
Emissions Derivatives	100,000	50,000
Weather Derivatives	100,000	50,000
Others	600,000	300,000

Section 9
Contracts for difference

- (1) ‘Financial contract for difference’ or ‘CFD’ means a derivative product that gives the holder an economic exposure, which can be long or short, to the difference between the price of an underlying asset at the start of the contract and the price when the contract is closed.
- (2) ‘CFD liquid class’ means:
- (a) an equity CFD liquid class; or
 - (b) a currency CFD liquid class.
- (3) ‘Equity CFD liquid class’ means a CFD based on a share for which there is a liquid market as determined in accordance with article 2(1)(17)(b) of Regulation 600/2014.
- (4) ‘Currency CFD liquid class’ means a CFD based on a foreign exchange rate characterised by a specific currency pair as specified in each row of Table 70 CFD on currency – liquid classes.
- (5) ‘CFD not having a liquid market’ means a CFD which is not a CFD liquid class.

Table 69
CFD on equity – liquid classes

CFD on equity - LIQUID CLASSES	LIS (€)	SSTI (€)
CFD on liquid shares	100,000	50,000

Table 70
CFD on currency – liquid classes

CFD on currency - LIQUID CLASSES		
CURRENCY PAIR	LIS (€)	SSTI (€)
USD-XAU	100,000	50,000
EUR-USD	100,000	50,000
JPY-USD	100,000	50,000
GBP-USD	100,000	50,000
EUR-JPY	100,000	50,000
GBP-JPY	100,000	50,000
CHF-EUR	100,000	50,000
AUD-USD	100,000	50,000

Table 71
CFD – classes not having a liquid market

CFD - CLASSES NOT HAVING A LIQUID MARKET	LIS (€)	SSTI (€)
CFD on equities other than liquid shares	100,000	50,000
CFD on bonds	100,000	50,000
CFD on futures on an equity	500,000	250,000
CFD on options on an equity	100,000	50,000
CFD on currency other than CFD on currency liquid classes	100,000	50,000
CFD on commodity	100,000	50,000
OTHERS	100,000	50,000

Section 10
Emission allowances

Section 11
LIS threshold floors

Table 47
LIS threshold floors

CLASS OF FINANCIAL INSTRUMENTS			LIS THRESHOLD FLOOR	
BOND TYPE	DEBT SENIORITY	ISSUER SUB-TYPE		
European Sovereign Bond			EUR	10,000,000
Non-European Sovereign Bond			EUR	10,000,000
Other European Public Bond			EUR	5,000,000
Convertible Bond		Financial	EUR	1,000,000
Covered Bond			EUR	5,500,000
Corporate Bond	Senior	Financial	EUR	2,500,000
Corporate Bond	Senior	Non-financial	EUR	1,500,000
Corporate Bond	Subordinated	Financial	EUR	2,000,000
Corporate Bond	Subordinated	Non-financial	EUR	5,000,000
Convertible Bond		Non-financial	EUR	2,500,000
Others			EUR	1,000,000
SFP				
SFP			EUR	5,500,000
SECURITISED DERIVATIVES				
Securitised Derivatives			EUR	100,000
EQUITY DERIVATIVES				
Equity Derivatives			EUR	500,000
COMMODITY DERIVATIVES				
Commodity Derivatives			EUR	1,000,000
INTEREST RATE DERIVATIVES				
Interest Rate Derivatives			EUR	10,000,000
EMISSION ALLOWANCES				
EUA			Tons of Carbon Dioxide	100,000
EUAA			Tons of Carbon Dioxide	50,000
CER			Tons of Carbon Dioxide	50,000
ERU			Tons of Carbon Dioxide	50,000
Others			Tons of Carbon Dioxide	50,000

CLASS OF FINANCIAL INSTRUMENTS	LIS THRESHOLD FLOOR	
FOREIGN EXCHANGE DERIVATIVES		
Non-deliverable Forwards (NDF)	EUR	1,000,000
Deliverable Forwards (DF)	EUR	1,000,000
FX Options	EUR	1,000,000
FX Swaps	EUR	1,000,000
Spread betting	EUR	1,000,000
FX Futures	EUR	100,000
CREDIT DERIVATIVES		
Credit Derivatives	EUR	10,000,000
OTHER DERIVATIVES		
Freight Derivatives	EUR	100,000
Emissions Derivatives	EUR	100,000
Weather Derivatives	EUR	100,000
Others	EUR	100,000
CFD		
Financial contract for difference (CFD)	EUR	100,000