

On-site Meeting of the Working Group on Euro Risk-Free Rates

Thursday, 13 November 2023 (11:00-16:30 CET)

Summary

1. Introductory remarks, approval of the agenda and obligations of the working group members under competition law

Mr James von Moltke (Chair) opened the meeting. He welcomed all the members of the Working Group (WG) to the third WG meeting of 2023, and the final meeting in this series, and reminded WG members of the agenda scheduled for today's meeting:

1. *Introductory remarks, approval of the agenda and obligations of the working group members under competition law*
2. *EURIBOR fallbacks survey: presentation of results*
3. *Final statement by the EUR RFR WG: discussion and approval*
4. *ISDA remarks and presentation on the transition to RFR/€STR*
5. *Final remarks by public sector and WG Chair*

Mr von Moltke expressed his gratitude to the WG members participating in the €STR Task Force for their contributions, including a proposed final public statement to be approved in the present meeting.

The Chair also thanked ESMA for having developed the EURIBOR fallbacks survey and for having run an analysis on the obtained responses, which will be presented under agenda item 2. He also thanked ISDA staff for providing an updated presentation on market data regarding the transition to risk-free rates (agenda item 4).

Mr von Moltke then reminded the members of the WG of their obligations under EU competition law, as described in the guidelines on compliance with EU competition law published on the ESMA's website¹.

2. EURIBOR fallbacks survey: presentation of results

Mr von Moltke handed over to Mr Michele Mazzoni (ESMA) to introduce the presentation on the results EURIBOR fallback survey (previously shared with the WG members). Mr Mazzoni started the presentation by explaining the structure of the prepared slides, guiding the audience through how the responses were analysed and treated. The survey included a data-gathering exercise on the use of EURIBOR and the level of adoption of EURIBOR fallback provisions, complemented by open questions focusing on the implementation of EURIBOR fallbacks in existing and new contracts.

Mr Mazzoni went through the slides presenting first the anonymised, aggregated results obtained from the CCPs' responses and then the anonymised, aggregated results obtained from the banks' responses. The aggregated replies by the banks included a breakdown by asset classes as follows: Derivatives, Mortgages and Other Consumer Lending, Bilateral and Syndicated Loans, Bonds, Trade

¹https://www.esma.europa.eu/sites/default/files/library/eu_competition_law_guidelines_for_the_working_group_on_euro_risk-free_rates.pdf

Finance and Other Products. For each of these asset classes, Mr Mazzoni presented data on: use of different EURIBOR tenors, split between contracts subject to EU jurisdictions vs non-EU jurisdictions, level of EURIBOR fallback provisions implementation. A summary of the replies to the open questions was presented for each asset class.

As final remarks, Mr Mazzoni underlined to the high level of fallbacks implementation observed in derivatives as opposed to the low implementation detected in the case of cash products, particularly for loans and mortgages. Given the results of the survey, Mr Mazzoni encouraged WG members to keep focusing on the inclusion of fallbacks in all products, to increase contractual robustness and ensure compliance with BMR. Furthermore, it was suggested that market participants and the national public sector could work together to foster fallbacks implementation in mortgages, as these are affected by national specificities.

Mr von Moltke thanked Mr Mazzoni for the presentation and opened the floor for comments. Mr Helmut Wacket (ECB) thanked ESMA staff for preparing this presentation. He referred to the qualitative assessment of the survey, in which some respondents mentioned that they will only further implement fallback provisions if there is additional legislation supporting fallback adoption or if the cessation of the main benchmark (in this case, EURIBOR) is foreseen. Mr Wacket expressed disappointment in relation to this type of feedback, hoping that market participants will increase their effort for fallbacks adoption without the need for regulatory action.

One member suggested the public sector to consider a repetition of this survey exercise in the future as to account for the adoption of fallback templates which were published recently by industry associations. Another member inquired ESMA on which National Authorities would be approached regarding the cash products results of the analysis of the EURIBOR fallbacks survey. Ms Iliana Lani (ESMA) clarified that the National Authorities to be contacted are still to be defined but that now the objective would be to get the WG's approval to pursue with such an approach, which starts with sharing the anonymised, aggregated results of the EURIBOR survey with all National Authorities that are members of ESMA.

The Chair asked WG members if they agree on sharing the anonymised, aggregated results of the EURIBOR survey with National Authorities. WG members agreed to this proposal.

3. Final statement by the EUR RFR WG: discussion and approval

Mr von Moltke handed over to Mr Alex Wilson (Chair's Office and Secretariat of the €STR Task Force) to present to the WG members the draft WG final statement prepared with the support of the €STR Task Force and the public sector. Mr Wilson introduced the content of the final statement: an overview of the milestones achieved by the WG since its inception, a short description of the multiple-rate environment operating in the eurozone, a reference to the full availability of each element of the EURIBOR fallback provisions recommended by the WG and the summary of the results of the EURIBOR survey presented in the previous agenda item. In its final section, the statement explained that WG members agreed that the current mandate had been completed and that the WG in its current form will cease, while ESMA will continue to monitor benchmark market developments and may recontact WG members in the future where necessary. Mr von Moltke thanked Mr Wilson for his presentation and opened the floor to comments.

One member shared his appreciation for the final statement and suggested that the reference to the transition from EONIA to €STR could be further highlighted as an important achievement planned by the WG. Mr Wilson agreed with this suggestion. Another member suggested to amend the text of the final statement concerning the results of the EURIBOR survey so as to underscore the fact that the aggregated results do not reflect all outstanding transactions across the market but only the data

provided by the respondents. The participants to the meeting expressed their support for this amendments and Mr Wilson confirmed that the final statement will be amended accordingly.

Finally, a comment was made in relation to the publication of the final statement: a member asked whether ESMA will promote the final statement after publication. Mr Mazzoni clarified that ESMA will issue a news item that will be sent to the press and posted in ESMA's communication platforms. He also added that the final statement will be shared with National Authorities, which can be further shared at national level.

Mr von Moltke thanked all the contributors to the WG final statement, noted consensus on the amendments discussed, and confirmed that the final text will be shared with WG members for a final review and then will be published on the WG webpage.

4. ISDA remarks and presentation on the transition to RFR/€STR

Mr von Moltke handed over to Mr Rick Sandilands (ISDA) to provide ISDA final remarks on the activities of the WG and to present the ISDA slides on Analysis of Interest Rates Derivatives Trading Activity by Underlying Reference Rates and Tenors (*the full presentation is included in Annex I to this document*).

Mr Sandilands started by thanking the WG members for their work in the WG scope, given the important mission that framed the Group's work within the global interest rate reform. Mr Sandilands highlighted the importance of the WG in identifying €STR as the risk-free rate, in providing support to ISDA over the -IBOR transition and in not letting the guard down in terms of fallback implementation in derivative contracts. He further noted that, despite the fact that ISDA already published the 2021 interest rate definitions, there are still transactions relying on the 2006 definitions, which may be problematic in terms of fallbacks implementation. He recommended market participants to adopt the latest ISDA definition.

Moving to the slides on interest rate derivatives (IRD), Mr Sandilands explained that ISDA has conducted the analysis of euro- and US dollar-denominated interest rate derivatives by underlying reference rates to show the adoption of €STR and SOFR in different regions. The data included in the presentation reflected reported transactions in the EU, the UK, and the US, and covered both cleared and non-cleared trades.

Mr Sandilands noted the percentage of trading activity in €STR as total euro-denominated interest rate derivatives traded notional: a) In the EU, the percentage of trading activity in €STR increased to 53.0% of total euro-denominated IRD traded notional in September 2023 from 45.1% in September 2022; b) In the UK, €STR-linked traded notional increased to 63.1% from 46.2% over the same period; c) In the US, the percentage of trading activity in €STR increased to 57.6% of total euro-denominated IRD traded notional in September 2023 compared to 41.5% in September 2022. Most transactions referencing €STR were short-term. In September 2023, 93.9% of €STR-linked IRD traded notional in the EU, 93.6% in the UK and 86.5% in the US had a tenor up to and including one year.

Mr von Moltke thanked Mr Sandilands for sharing ISDA data on IRD and for the remarks concerning the achievements of the WG.

5. Final remarks by public sector and WG Chair

Mr von Moltke gave the floor to representatives of the public sector from the European Central Bank, ESMA and the European Commission to share their views on the fulfilment of the WG's mission.

Mr Wacket (ECB) commented the first years of operation of the WG, during which the ECB provided the Secretariat in concert with ING's Chairmanship. He referred to the speed and depth of the work, the quality of the working group recommendations and the enormity of the effect, which remained

unsurpassed, highlighting in particular the well-steered transition to the euro short-term rate (€STR). He also mentioned the smooth transfer of the WG secretariat role from the ECB to ESMA. Mr Wacket thanked all participants in the WG for the involvement and strong commitment throughout the years, while stressing that additional effort should be made by market participants (including members) to increase the adoption of EURIBOR fallback provisions in all contracts.

Ms Lani (ESMA) focused on the last years of the WG, during which the work of ESMA as secretariat was accompanied by the chairmanship of Deutsche Bank. She highlighted that, to face the discontinuation of LIBOR rates and EONIA, ESMA, as WG secretariat, launched a new type of WG exercise in the form of surveys. These recurring surveys represented a fine example of practical cooperation between the private and the public sectors and provided added value and unique information to the discussions concerning the interest rate reform in the EU. She suggested that this similar exercise may be launched also in the future, depending on the developments of the interest rate landscape in the EU. To conclude, Ms Lani confirmed that adoption of EURIBOR fallbacks continue to be a priority for ESMA and that the results of the EURIBOR survey clearly show that market participants should increase their efforts to implement EURIBOR fallbacks in cash products.

Mr Rik Hansen (European Commission) pointed out that some decisions of the European Commission, such as the designation of statutory replacement rates for EONIA, were supported by the data and information provided by the WG. Also for this reason, he strongly recognised the relevance of the work delivered by the WG and thanked all the WG members for their contributions.

Finally, Mr von Moltke thanked everyone for their time and commitment to the activities of the WG, including via their participation in the €STR Task Force, and agreed with the messages conveyed by the public sector, highlighting the achievements and the innovative developments that were brought to the financial markets thanks to the WG. He also mentioned that, despite the cessation of the WG's activities, there are synergies that stem from the interaction among the WG members that should not be lost, confirming that there is value in keeping the WG members' contacts for further initiatives.

List of participants

Participant's organisation

Name of participant

Chairperson

Deutsche Bank

Mr James von Moltke

Chair's office

Deutsche Bank

Ms Queenie Choong

Deutsche Bank

Mr Alex Wilson

Deutsche Bank

Mr Simon Goodwin

Voting members

AXA

Mr Alexandre Papadacci

Banco Sabadell

Ms Marta Riveira Cazorla

Bank of Ireland

Mr Barry Moran

Bank of Ireland

Mr David Tilson

Barclays

Mr Joseph Mcquade

Barclays

Mr Michael Taylor

BBVA

Mr Ignacio Ollero

BME Clearing

Mr Emilio Gamarra Mompeán

BNP Paribas

Mr Jean Christophe Reocreux

BNP Paribas

Mr Xavier Aublin

BPCE/Natixis

Mr Olivier Hubert

BPCE/Natixis

Mr Grégoire de Clarens

CaixaBank, S.A.

Mr Francesc Xavier Combis

Crédit Agricole

Ms Florence Mariotti

Crédit Agricole

Ms Pascaline Monnet

Deutsche Bank

Mr Juergen Sklarczyk

DZ Bank

Mr Christoph Block

Erste Group

Mr Neil Mcleod

Eurobank SA

Mr Dimitris Psychogios

European Investment Bank

Mr Nikolaos Tzoldos

European Investment Bank

Mr Yassine Boudghene

HSBC

Mr Geoffroy Bertran

ICE

Mr Uriel Amitai

ICE

Mr Stelios Tselikas

ICMA

Katie Kelly

ING Bank

Ms Stephanie Broks

Intesa Sanpaolo

Ms Maria Cristina Lege

KfW Bankengruppe

Mr Markus Schmidtchen

LCH Group

Mr Davide Tortora

Santander
Société Générale
Unicredit

Mr Javier Pareja Marta
Mr Stephane Cuny
Mr Umberto Crespi

Non-voting members

European Money Markets Institute
International Swaps and Derivatives Association
International Swaps and Derivatives Association
Loan Market Association

Mr Jean-Louis Schirmann
Mr Rick Sandilands
Mr Jonathan Martin
Ms Kam Hessling

Observers

European Central Bank
European Central Bank
European Commission
European Securities and Markets Authority

Mr Helmut Wacket
Mr Vladimir Tsonchev
Mr Rik Hansen
Ms Iliana Lani

Secretariat

European Securities and Markets Authority
European Securities and Markets Authority
European Securities and Markets Authority
European Securities and Markets Authority
European Securities and Markets Authority

Mr Michele Mazzoni
Mr Cristian Weststeijn
Mr Lelio Lapresa
Mr Artur Pinzari
Ms Benedita Costa

Annex I – ISDA presentation under item 5 of the agenda

Analysis of IRD Trading Activity by Underlying Reference Rates and Tenors



Executive Summary

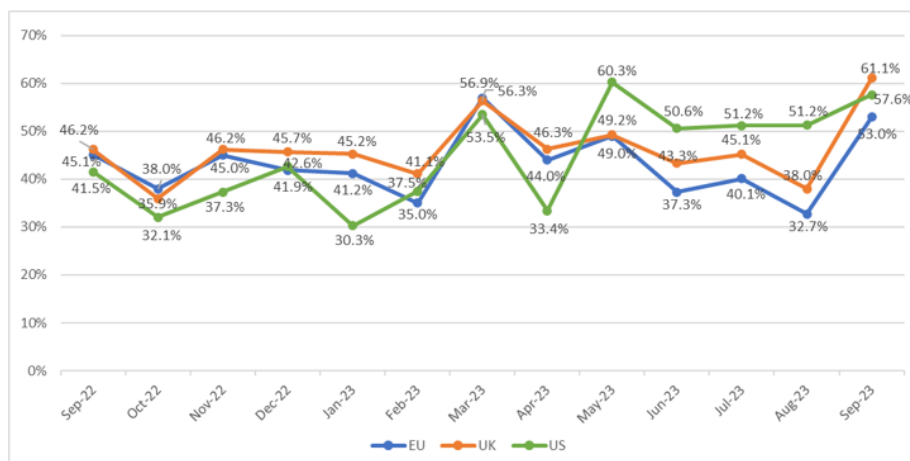
€STR Adoption

- In the EU, the percentage of trading activity in €STR increased to 53.0% of total euro-denominated IRD traded notional in September 2023 from 45.1% in September 2022.
- In the UK, €STR-linked traded notional increased to 63.1% from 46.2% over the same period.
- In the US, the percentage of trading activity in €STR increased to 57.6% of total euro-denominated IRD traded notional in September 2023 compared to 41.5% in September 2022.
- Most transactions referencing €STR were short-term. In September 2023, 93.9% of €STR-linked IRD traded notional in the EU, 93.6% in the UK and 86.5% in the US had a tenor up to and including one year.

SOFR Adoption

- In the EU, the percentage of trading activity in SOFR reached 91.1% of total US dollar-denominated IRD traded notional in September 2023 compared to 67.3% in September 2022.
- In the UK, SOFR-linked traded notional decreased to 46.4% from 63.4% over the same period.
- In the US, the percentage of trading activity in SOFR increased to 60.9% of total US dollar-denominated IRD traded notional in September 2023 compared to 45.3% in September 2022.
- In September 2023, 50.8% of SOFR-linked IRD traded notional in the EU, 37.0% in the UK and 48.6% in the US had a tenor up to and including one year.

€STR Traded Notional as % of EUR-denominated IRD Traded Notional by Region



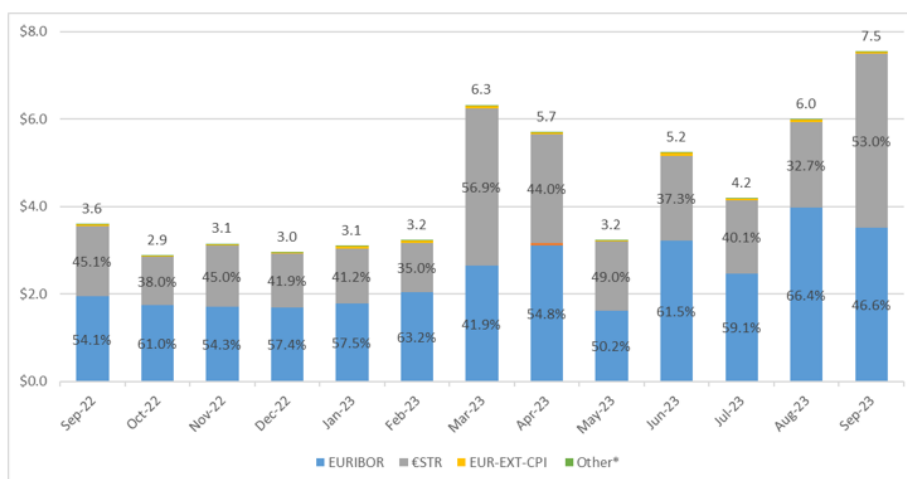
Source: DTCC SDR, European APAs and TVs

€STR and EURIBOR Traded Notional as % of EUR-denominated IRD Traded Notional by Region

	EU		UK		US	
	€STR	EURIBOR	€STR	EURIBOR	€STR	EURIBOR
Sep-22	45.1%	54.1%	46.2%	52.1%	41.5%	57.1%
Oct-22	38.0%	61.0%	35.9%	62.6%	32.1%	66.0%
Nov-22	45.0%	54.3%	46.2%	52.2%	37.3%	60.9%
Dec-22	41.9%	57.4%	45.7%	53.0%	42.6%	52.2%
Jan-23	41.2%	57.5%	45.2%	52.4%	30.3%	65.9%
Feb-23	35.0%	63.2%	41.1%	56.8%	37.5%	57.9%
Mar-23	56.9%	41.9%	56.3%	42.0%	53.5%	44.6%
Apr-23	44.0%	54.8%	46.3%	52.0%	33.4%	65.0%
May-23	49.0%	50.2%	49.2%	49.6%	60.3%	37.9%
Jun-23	37.3%	61.5%	43.3%	54.7%	50.6%	45.2%
Jul-23	40.1%	59.1%	45.1%	52.8%	51.2%	43.2%
Aug-23	32.7%	66.4%	38.0%	61.2%	51.2%	42.5%
Sep-23	53.0%	46.6%	61.1%	38.1%	57.6%	37.2%

Source: DTCC SDR, European APAs and TV's

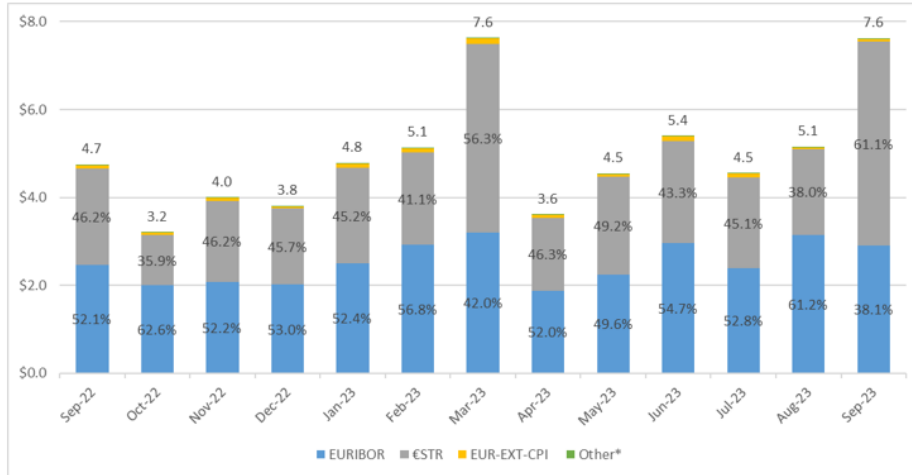
Euro-denominated IRD Traded Notional Reported in the EU (US\$ trillions)



Source: European APAs and TV's

*Other includes EURIBOR/€STR, EURIBOR/EONIA and other underlying reference rates

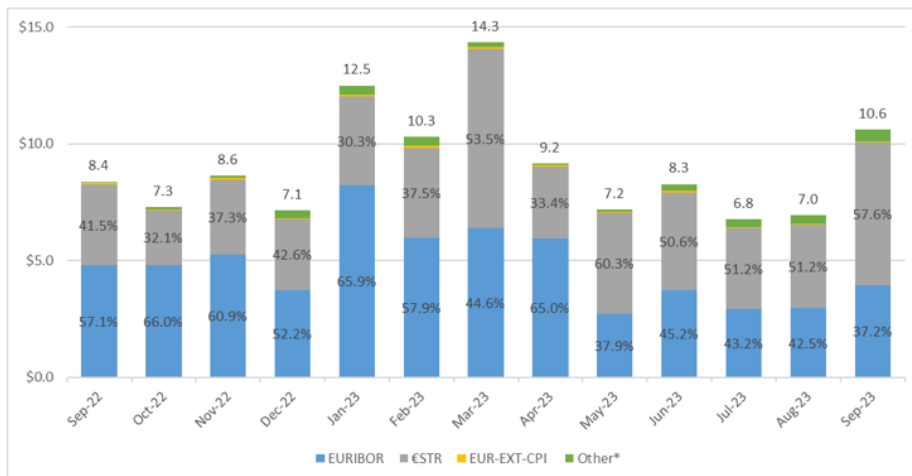
Euro-denominated IRD Traded Notional Reported in the UK (US\$ trillions)



Source: European APAs and TVs

*Other includes EURIBOR/€STR, EURIBOR/EONIA and other underlying reference rates

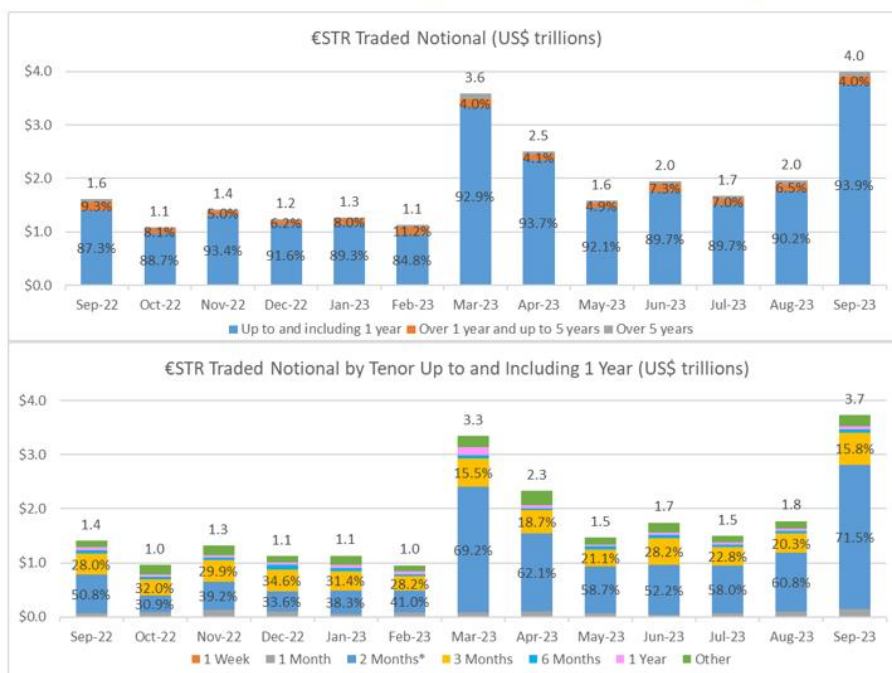
Euro-denominated IRD Traded Notional Reported in the US (US\$ trillions)



Source: DTCC SDR

*Other includes EURIBOR/€STR, EURIBOR/EONIA, EURIBOR/EUR-EXT-CPI and other underlying reference rates

€STR Traded Notional Reported in the EU by Tenors



Source: European APAs and TVs
*2 months tenor also includes 6 weeks and 7 weeks tenors

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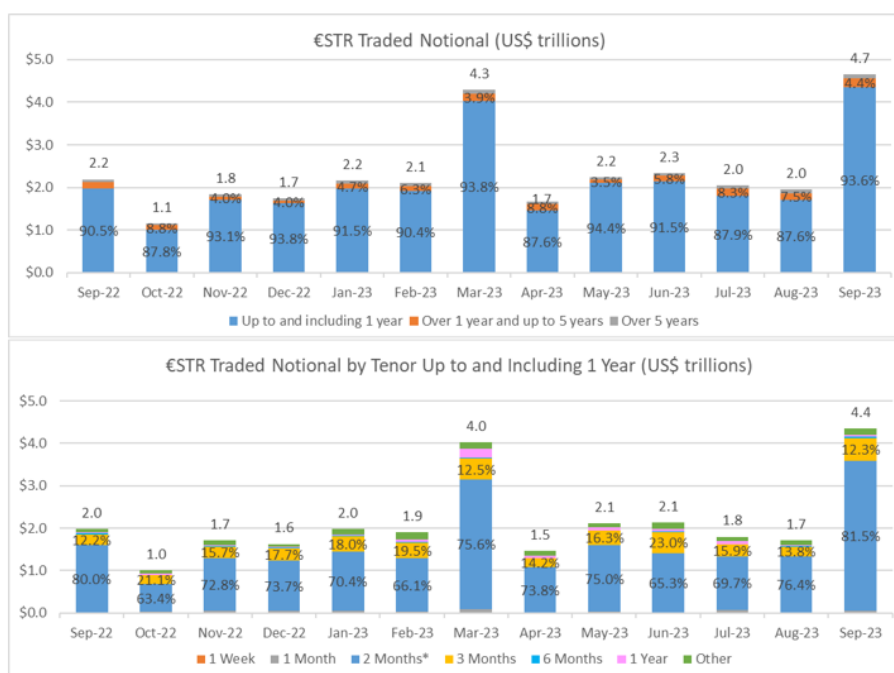
Percentage of €STR Traded Notional Reported in the EU by Tenors

	€STR								
	Tenor ≤ 1 Year							1 Year < Tenor ≤ 5 Years	Tenor > 5 Years
	1 Week	1 Month	2 Months*	3 Months	6 Months	1 Year	Other		
Sep-22	0.1%	4.0%	44.3%	24.4%	3.3%	3.8%	7.4%	9.3%	3.4%
Oct-22	0.3%	8.4%	27.4%	28.4%	3.6%	4.4%	16.3%	8.1%	3.2%
Nov-22	0.1%	9.7%	36.6%	27.9%	3.1%	3.5%	12.5%	5.0%	1.7%
Dec-22	0.1%	7.9%	30.8%	31.7%	7.5%	3.7%	9.9%	6.2%	2.2%
Jan-23	0.9%	3.9%	34.2%	28.1%	4.7%	4.4%	13.2%	8.0%	2.8%
Feb-23	0.0%	8.4%	34.8%	23.9%	3.0%	5.1%	9.7%	11.2%	3.9%
Mar-23	0.0%	2.5%	64.3%	14.4%	1.9%	4.2%	5.6%	4.0%	3.1%
Apr-23	0.0%	3.9%	58.2%	17.5%	1.2%	2.1%	10.8%	4.1%	2.2%
May-23	0.3%	4.6%	54.1%	19.5%	3.8%	2.0%	7.9%	4.9%	3.0%
Jun-23	0.0%	2.5%	46.8%	25.3%	3.6%	2.2%	9.3%	7.3%	3.1%
Jul-23	0.8%	3.7%	52.0%	20.4%	2.5%	3.3%	7.0%	7.0%	3.3%
Aug-23	0.4%	4.9%	54.8%	18.3%	2.6%	1.9%	7.3%	6.5%	3.4%
Sep-23	0.2%	3.4%	67.1%	14.9%	1.4%	1.5%	5.3%	4.0%	2.2%

Source: European APAs and TVs
*2 months tenor also includes 6 weeks and 7 weeks tenors
Tenor is calculated based on ISIN Term of contract data

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€STR Traded Notional Reported in the UK by Tenors



Source: European APAs and TVs
*2 months tenor also includes 6 weeks and 7 weeks tenors

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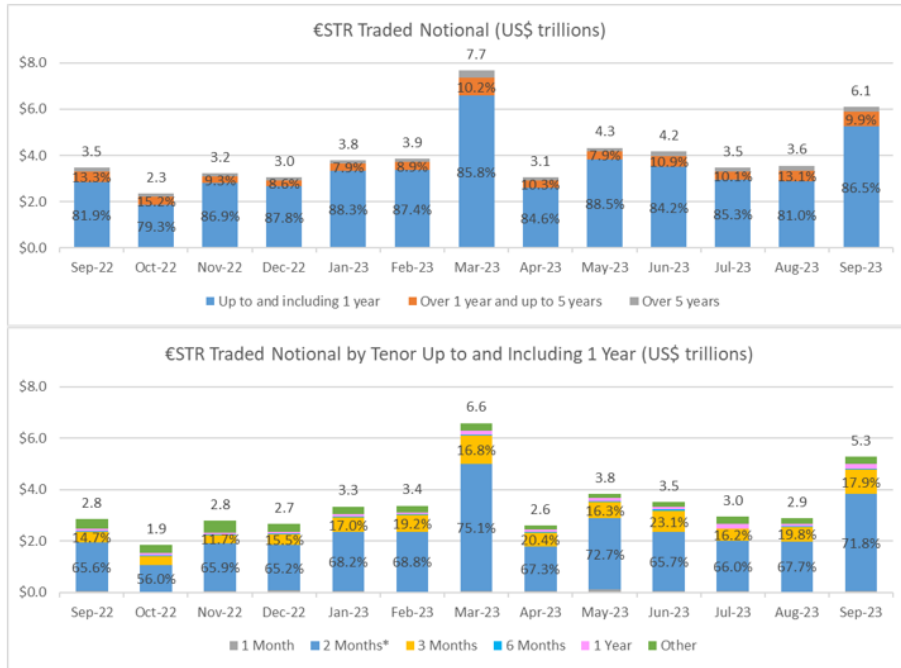
Percentage of €STR Traded Notional Reported in the UK by Tenors

	€STR								
	Tenor ≤ 1 Year							1 Year < Tenor ≤ 5 Years	Tenor > 5 Years
	1 Week	1 Month	2 Months*	3 Months	6 Months	1 Year	Other		
Sep-22	0.0%	0.9%	72.4%	11.0%	1.5%	1.6%	3.1%	6.3%	3.2%
Oct-22	0.1%	3.1%	55.7%	18.5%	0.6%	2.9%	6.9%	8.8%	3.4%
Nov-22	0.0%	2.6%	67.8%	14.6%	0.4%	1.4%	6.3%	4.0%	2.9%
Dec-22	0.0%	2.5%	69.2%	16.6%	0.6%	1.1%	3.8%	4.0%	2.2%
Jan-23	0.0%	2.5%	64.4%	16.5%	0.7%	1.5%	5.8%	4.7%	3.8%
Feb-23	0.0%	1.6%	59.8%	17.6%	0.5%	2.6%	8.5%	6.3%	3.3%
Mar-23	0.0%	2.3%	70.9%	11.7%	0.3%	4.8%	3.8%	3.9%	2.3%
Apr-23	0.0%	0.6%	64.6%	12.4%	0.4%	3.2%	6.4%	8.8%	3.5%
May-23	0.0%	1.1%	70.8%	15.4%	0.2%	2.9%	4.1%	3.5%	2.0%
Jun-23	0.0%	0.9%	59.8%	21.1%	0.4%	2.3%	7.0%	5.8%	2.7%
Jul-23	0.0%	3.7%	61.3%	14.0%	0.5%	2.9%	5.6%	8.3%	3.8%
Aug-23	0.0%	1.1%	66.9%	12.1%	0.4%	1.3%	5.7%	7.5%	4.9%
Sep-23	0.0%	1.0%	76.3%	11.5%	0.5%	0.8%	3.4%	4.4%	2.1%

Source: European APAs and TVs
*2 months tenor also includes 6 weeks and 7 weeks tenors
Tenor is calculated based on ISIN Term of contract data

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€STR Traded Notional Reported in the US by Tenors



Source: DTCC SDR

*2 months tenor also includes 6 weeks and 7 weeks tenors

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Percentage of €STR Traded Notional Reported in the US by Tenors

	€STR								
	Tenor ≤ 1 Year						1 Year < Tenor ≤ 5 Years	Tenor > 5 Years	
	1 Month	2 Months*	3 Months	6 Months	1 Year	Other			
Sep-22	1.9%	53.7%	12.0%	0.9%	2.6%	10.8%	13.3%	4.8%	
Oct-22	1.4%	44.4%	14.3%	1.3%	3.8%	14.1%	15.2%	5.5%	
Nov-22	2.1%	57.2%	10.1%	0.6%	2.3%	14.5%	9.3%	3.8%	
Dec-22	3.1%	57.2%	13.6%	1.0%	2.4%	10.5%	8.6%	3.6%	
Jan-23	1.6%	60.2%	15.0%	1.4%	2.4%	7.7%	7.9%	3.8%	
Feb-23	0.9%	60.1%	16.8%	0.7%	2.1%	6.8%	8.9%	3.8%	
Mar-23	0.9%	64.4%	14.4%	0.2%	2.0%	4.0%	10.2%	4.0%	
Apr-23	1.8%	56.9%	17.3%	0.6%	3.7%	4.3%	10.3%	5.1%	
May-23	2.3%	64.4%	14.4%	0.5%	2.8%	4.1%	7.9%	3.6%	
Jun-23	1.0%	55.3%	19.4%	1.2%	2.6%	4.6%	10.9%	4.9%	
Jul-23	1.6%	56.3%	13.8%	0.1%	5.1%	8.4%	10.1%	4.6%	
Aug-23	0.7%	54.8%	16.0%	0.5%	2.9%	6.1%	13.1%	5.9%	
Sep-23	0.7%	62.1%	15.5%	0.6%	2.9%	4.6%	9.9%	3.7%	

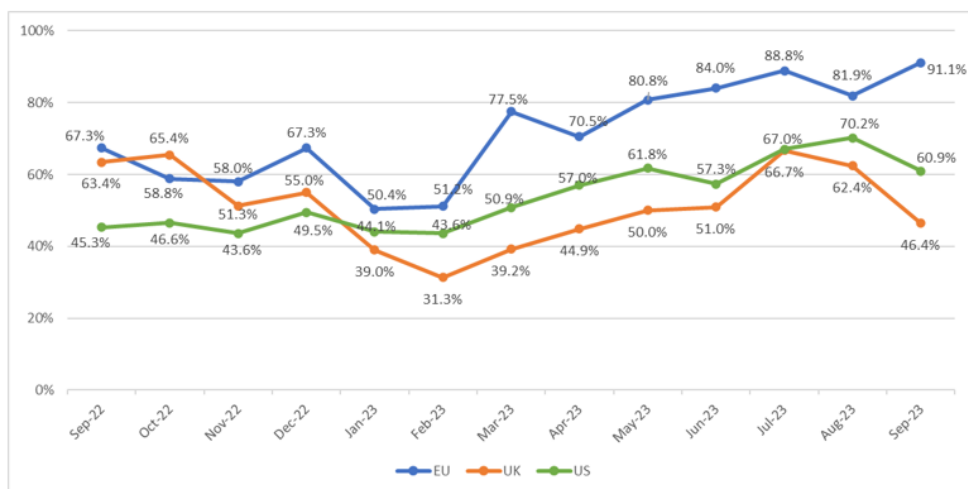
Source: DTCC SDR

*2 months tenor also includes 6 weeks and 7 weeks tenors

Tenor is calculated as the difference between the effective date and the maturity date

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SOFR Traded Notional as % of USD-denominated IRD Traded Notional by Region



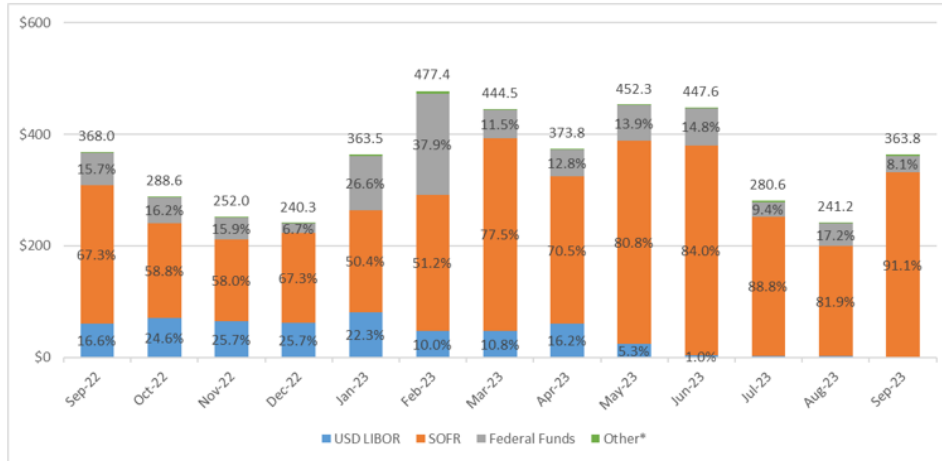
Source: DTCC SDR, European APAs and TVs

SOFR and USD LIBOR Traded Notional as % of USD-denominated IRD Traded Notional by Region

	EU			UK			US		
	SOFR	USD LIBOR	Fed Funds	SOFR	USD LIBOR	Fed Funds	SOFR	USD LIBOR	Fed Funds
Sep-22	67.3%	16.6%	15.7%	63.4%	10.8%	25.7%	45.3%	25.7%	27.3%
Oct-22	58.8%	24.6%	16.2%	65.4%	4.8%	29.6%	46.6%	34.9%	16.7%
Nov-22	58.0%	25.7%	15.9%	51.3%	11.5%	37.1%	43.6%	31.1%	23.8%
Dec-22	67.3%	25.7%	6.7%	55.0%	3.8%	41.0%	49.5%	21.4%	26.8%
Jan-23	50.4%	22.3%	26.6%	39.0%	2.6%	58.2%	44.1%	25.1%	28.5%
Feb-23	51.2%	10.0%	37.9%	31.3%	1.4%	67.1%	43.6%	8.6%	46.1%
Mar-23	77.5%	10.8%	11.5%	39.2%	3.1%	57.7%	50.9%	9.4%	38.2%
Apr-23	70.5%	16.2%	12.8%	44.9%	3.4%	51.7%	57.0%	13.1%	28.0%
May-23	80.8%	5.3%	13.9%	50.0%	2.4%	47.4%	61.8%	4.2%	32.4%
Jun-23	84.0%	1.0%	14.8%	51.0%	1.1%	47.8%	57.3%	1.9%	39.2%
Jul-23	88.8%	1.0%	9.4%	66.7%	0.1%	32.8%	67.0%	0.2%	31.0%
Aug-23	81.9%	0.8%	17.2%	62.4%	0.1%	37.3%	70.2%	0.0%	28.6%
Sep-23	91.1%	0.2%	8.1%	46.4%	0.2%	53.2%	60.9%	0.1%	37.3%

Source: DTCC SDR, European APAs and TVs

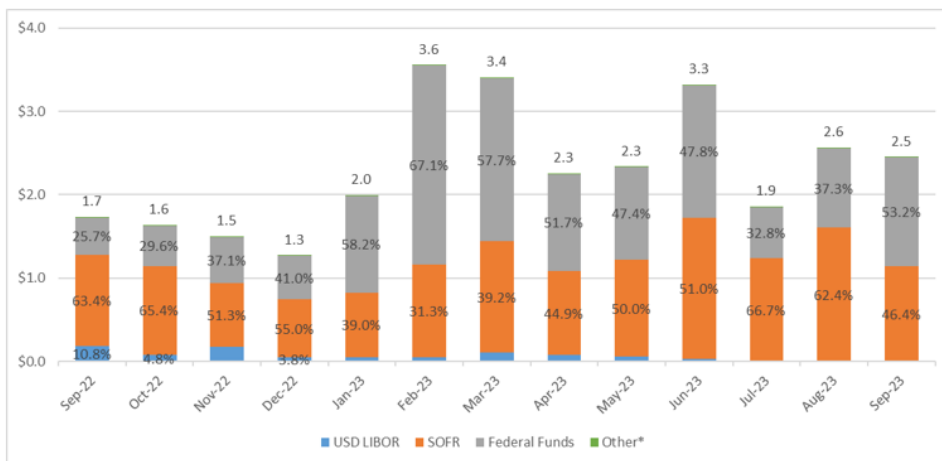
USD-denominated IRD Traded Notional Reported in the EU (US\$ billions)



Source: European APAs and TV's

*Other includes other underlying reference rates. SOFR/USD LIBOR and SOFR/Fed Funds swaps are included under SOFR.

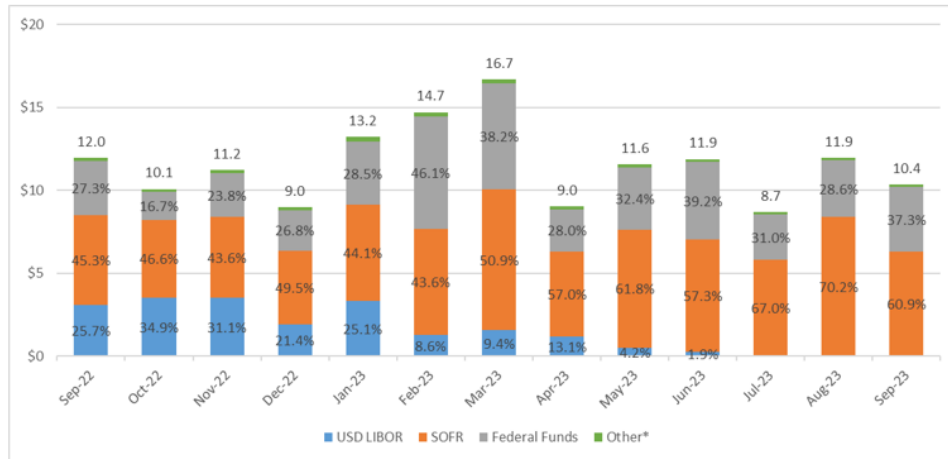
USD-denominated IRD Traded Notional Reported in the UK (US\$ trillions)



Source: European APAs and TV's

*Other includes other underlying reference rates. SOFR/USD LIBOR and SOFR/Fed Funds swaps are included under SOFR.

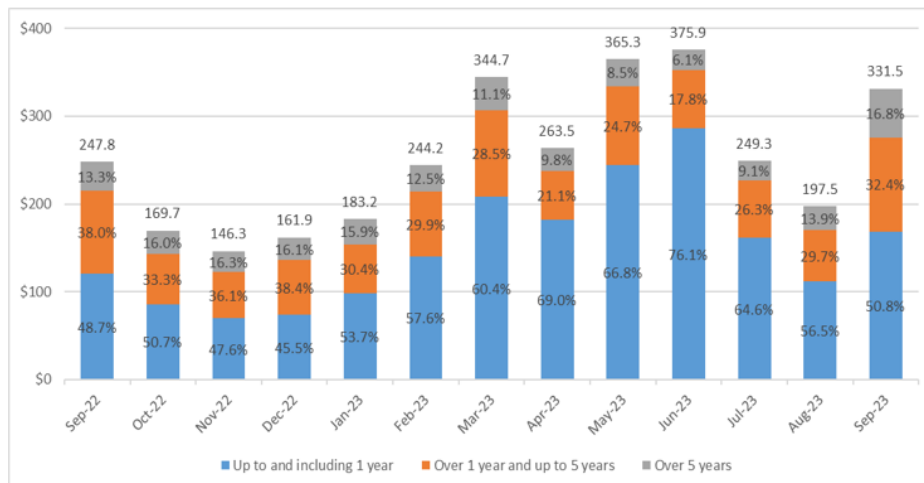
USD-denominated IRD Traded Notional Reported in the US (US\$ trillions)



Source: DTCC SDR

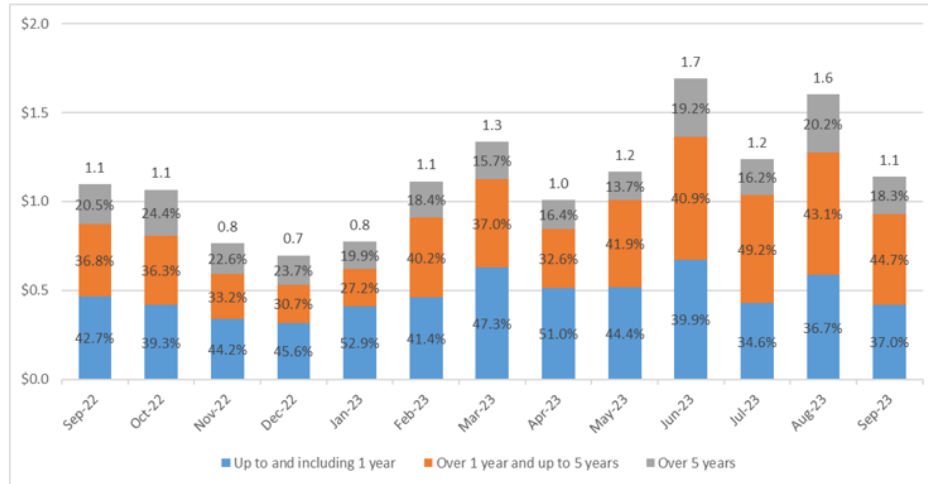
*Other includes other underlying reference rates. SOFR/USD LIBOR and SOFR/Fed Funds swaps are included under SOFR

SOFR Traded Notional Reported in the EU by Tenors (US\$ billions)



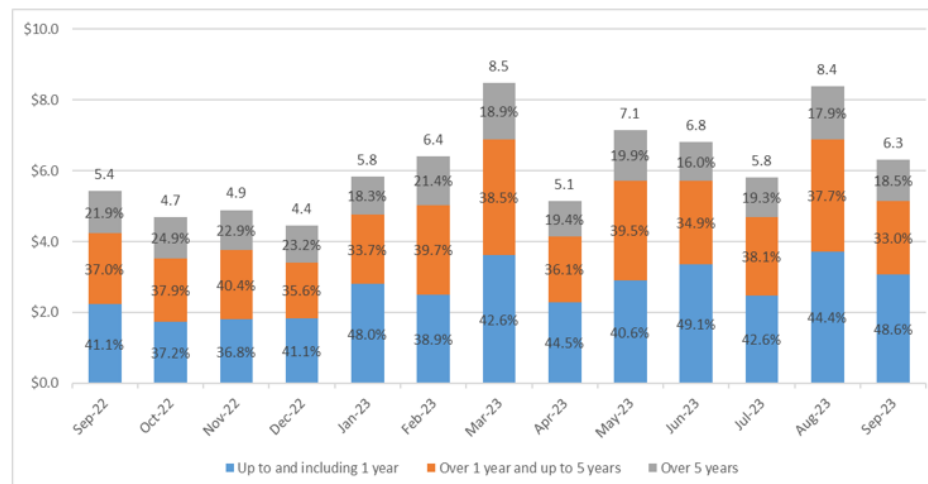
Source: European APAs and TVs

SOFR Traded Notional Reported in the UK by Tenors (US\$ trillions)



Source: European APAs and TVs

SOFR Traded Notional Reported in the US by Tenors (US\$ trillions)



Source: DTCC SDR

European Data

- EU and UK IRD trading data is based on transactions publicly reported by 30 European approved publication arrangements (APAs) and trading venues (TVs).
- EU IRD trading activity is measured by IRD traded notional reported by APAs and TVs located in the EU, while UK IRD trading activity is measured by IRD traded notional reported by APAs and TVs located in the UK.
- Data set includes only new transactions. All cancelled transactions are removed and amended trades are updated using the dissemination ID field. Transactions reported with a four-week aggregation flag and volume omission flag are also removed from the data set.
- Reported notional is converted to US dollars based on daily FX rates.
- All reported transactions are aggregated on a daily basis. Monthly traded notional referenced in this report represents the sum of converted traded notional of all transactions executed during the month.

US Data

- Analysis of US IRD is based on data from the Depository Trust & Clearing Corporation (DTCC) swap data repository (SDR) that only covers transactions required to be disclosed under Commodity Futures Trading Commission regulations.
- Data set includes only new transactions. All cancelled transactions are removed and amended trades are updated using the dissemination ID field.
- Reported notional is converted to US dollars based on daily FX rates.
- All reported transactions are aggregated on a daily basis. Monthly traded notional referenced in this report represents the sum of converted traded notional of all transactions executed during the month.

Data Limitations

- While ISDA believes this data covers the majority of OTC IRD transactions in Europe, it doesn't capture 100% of the market.
- In Europe, transparency reporting requirements apply to instruments that are admitted to trading on regulated markets (RMs), as well as those that are traded on other TVs, including MTFs and OTFs. The transparency requirements also apply to investment firms not trading on TVs if the underlying financial instrument is 'traded on a trading venue' (TOTV) or is an index or basket composed of financial instruments that are traded on a TV. Financial instruments that are solely traded outside of TVs are not subject to the requirements and, therefore, are not included in this analysis.
- When European counterparties face US entities on a swap execution facility (SEF), ESMA does not require EU firms to systematically republish information in the EU about transactions executed on TVs outside the EU that are subject to transparency provisions similar to those applicable to EU TVs. Under US rules, SEFs are required to send relevant trade details to an SDR for real-time public dissemination. Therefore, these trades will be captured in US trading activity only, resulting in a potential understatement of European traded notional.
- Trades executed on MTFs and OTFs between EU and US counterparties may be disseminated to the public twice. Since EU and US reporting rules have not been determined equivalent, trades executed on MTFs and OTFs are viewed as off-facility transactions for US real-time reporting purposes and are subject to the CFTC reporting rules. At the same time, MTFs and OTFs have an obligation to send trade details for public dissemination. Therefore, these trades may be double counted in European and US combined trading activity analysis.

For questions on this analysis, please contact:

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 990 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).