ECB Money Market Contact Group
24th March 2020

Development of the €STR benchmark

Main developments related to the benchmark rate transition, mayor upcoming events and possible impact
Development of the €STR benchmark

AGENDA:

• Fixing trend
• Swap market
• CCP
• Primary Market
• Working Group on RFR - Ambassadors
€STR – Fixing trend

Key points of the first 6 month of €STR fixing:

- Robust methodology
- Low volatility (update 18° march)

### €STR

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
<th>Volume [mln]</th>
<th>Banks</th>
<th>Transactions</th>
<th>%Share (volume of 5 largest banks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-19</td>
<td>-0.549</td>
<td>31.113</td>
<td>19</td>
<td>422</td>
<td>53</td>
</tr>
<tr>
<td>Nov-19</td>
<td>-0.536</td>
<td>31.638</td>
<td>19</td>
<td>427</td>
<td>56</td>
</tr>
<tr>
<td>Dec-19</td>
<td>-0.541</td>
<td>29.303</td>
<td>10</td>
<td>412</td>
<td>53</td>
</tr>
<tr>
<td>Jan-20</td>
<td>-0.538</td>
<td>31.549</td>
<td>19</td>
<td>432</td>
<td>56</td>
</tr>
<tr>
<td>Feb-20</td>
<td>-0.538</td>
<td>31.599</td>
<td>19</td>
<td>432</td>
<td>57</td>
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<tr>
<td>Mar-20</td>
<td>-0.539</td>
<td>40.996</td>
<td>19</td>
<td>476</td>
<td>58</td>
</tr>
</tbody>
</table>

- Reaction to monetary policy (e.g. tiering) and market events (e.g. year end)
- Significant rising volumes in March – WHY?
  - Additional liquidity needs for some banks due to COVID 19 emergency?
  - Different behaviour of MM Funds and switch from investments to liquidity during COVID 19 emergency?
  - Arbitrage EUR-USD or secured-unsecured?

Source: Intesa Sanpaolo - ECB website
Key points of the €STR SWAP Market on MTF:

- Increasing market liquidity
- Multilateral trading facilities show prices also on very long maturities
- Bid-ask spread in line with Eonia Market
- Reaction to monetary policy expectations and market events
Key points of the €STR SWAP Market via Brokers:

- **Main Short Term interest Rates Broker** have completed the set up of pages published on info provider pages.

- **Prices for term structure, forward €STR, ECB and IM dates** are always available.

- **Prices are still published spreading the new pages replicating the Eonia Market prices.**

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### Additional Information

**Currency** | **Instrument 01S** | **Additional Information**
---|---|---
EUR | OIS | ESTR

### BID ASK SOURCE LOC DATE TIME

<table>
<thead>
<tr>
<th>Currency</th>
<th>Instrument</th>
<th>Source</th>
<th>Location</th>
<th>Date</th>
<th>Time</th>
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<td>OIS</td>
<td>BGC Partners LON</td>
<td>10MAR20</td>
<td>18:00</td>
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<td>BGC Partners LON</td>
<td>10MAR20</td>
<td>18:00</td>
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<td>OIS</td>
<td>BGC Partners LON</td>
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<td>EUR</td>
<td>OIS</td>
<td>BGC Partners LON</td>
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<td>BGC Partners LON</td>
<td>10MAR20</td>
<td>18:00</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Source Eikon Refinitiv
**ESTR – Swap market depth**

**Maturity 1 year:**
- Sizes up to 250mln
- Demand is (and will be) fundamental
- Many banks are still working Eonia based taking into consideration the maturity before the end of 2021

**Maturity 5 years:**
- Sizes up to 100mln
- The market is still dominated by EONIA swaps flows
- A significant part of big players are waiting for the discounting switch.

Source Bloomberg
€STR – Swap market depth

Maturity 10 years:

- Sizes up to 100mln but the majority of counterparties shows prices only for small amounts
- Limited number of market makers
- Bid-ask spread from 1 to 5 bps
- Same issues described for 5 years maturity related to discounting switch

Maturity 30 years:

- Sizes up to 100mln but the majority of counterparties shows prices only for small amounts
- Limited number of market makers
- Bid-ask spread from 1 to 5 bps
- Same issues described for 5 years maturity related to discounting switch

Source Bloomberg
### Key points of LCH Volumes (€STR Swaps):

- In the <1 year bucket, €STR volumes are constantly increasing. And surpassing other main RFRs.

- In the 1-2 and 2+ years, €STR OIS volumes increased less evidently. Market players see as decisive the EONIA/€STR discounting switch.

<table>
<thead>
<tr>
<th>Month</th>
<th>Tenor Bucket</th>
<th>€STR</th>
<th>SARON</th>
<th>SOFR</th>
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<tbody>
<tr>
<td>Feb 2020</td>
<td>&lt;1 Yr</td>
<td>188.21</td>
<td>124.25</td>
<td>165.02</td>
</tr>
<tr>
<td></td>
<td>1-2 Yrs</td>
<td>1.67</td>
<td>0.72</td>
<td>35.50</td>
</tr>
<tr>
<td></td>
<td>2+ Yrs</td>
<td>8.22</td>
<td>5.09</td>
<td>97.15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>198.10</td>
<td>130.06</td>
<td>297.67</td>
</tr>
<tr>
<td>Jan 2020</td>
<td>&lt;1 Yr</td>
<td>179.98</td>
<td>78.32</td>
<td>95.79</td>
</tr>
<tr>
<td></td>
<td>1-2 Yrs</td>
<td>2.97</td>
<td>4.12</td>
<td>64.72</td>
</tr>
<tr>
<td></td>
<td>2+ Yrs</td>
<td>8.81</td>
<td>8.34</td>
<td>48.56</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>191.76</td>
<td>90.78</td>
<td>209.06</td>
</tr>
<tr>
<td>Dec 2019</td>
<td>&lt;1 Yr</td>
<td>93.20</td>
<td>45.49</td>
<td>134.84</td>
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<tr>
<td></td>
<td>1-2 Yrs</td>
<td>3.05</td>
<td>0.70</td>
<td>36.54</td>
</tr>
<tr>
<td></td>
<td>2+ Yrs</td>
<td>4.11</td>
<td>4.41</td>
<td>20.63</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>96.25</td>
<td>50.60</td>
<td>192.01</td>
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<tr>
<td>Nov 2019</td>
<td>&lt;1 Yr</td>
<td>43.63</td>
<td>65.20</td>
<td>202.50</td>
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<tr>
<td></td>
<td>1-2 Yrs</td>
<td>1.92</td>
<td>2.92</td>
<td>26.91</td>
</tr>
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<td></td>
<td>2+ Yrs</td>
<td>1.09</td>
<td>3.54</td>
<td>14.63</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>46.64</td>
<td>71.65</td>
<td>244.04</td>
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<tr>
<td>Oct 2019</td>
<td>&lt;1 Yr</td>
<td>27.11</td>
<td>83.90</td>
<td>140.66</td>
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<td></td>
<td>1-2 Yrs</td>
<td>2.08</td>
<td>3.71</td>
<td>31.47</td>
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<td></td>
<td>2+ Yrs</td>
<td>0.48</td>
<td>1.01</td>
<td>43.79</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29.66</td>
<td>88.62</td>
<td>215.92</td>
</tr>
</tbody>
</table>

Source LCH – volumes in bn $
The CCP discounting switch is expected to be the most relevant event in 2020. It will boost the collateralized market but it will also incentivate the switch for bilateral contracts.

**EUR – Transizione PAI rate/discounting regime from EONIA to €STR flat:**
- **LCH:** Scope: EUR denominated products con PAI rate = EONIA Transition Date: **June 22nd, 2020** Cash Compensation Payments
- **Eurex Clearing:** Scope: EUR denominated products con PAI rate = EONIA Transition Date: **June 22nd, 2020** Cash Compensation Payments

**COVID 19: risk of delay?**

No news at the moment from CCPs.
€STR – Market Survey on term market (1/2)

With the purpose to assess the market conditions, Intesa Sanpaolo last 20th February contacted 23 market players active in the Eonia Swap Market, asking three specific questions:

**QUESTION 1:**
Are you already active in the long end (2-10y) €STR swaps market-making?

- 16 out of 23 declare they are active. Some say they are not yet ready with the electronic trading but willing to assist with bilateral prices
- 5 out 23 say they are not active, one is planning to quote from end of March
- 2 out 23 didn’t answer
QUESTION 2: How would you define the current liquidity in 2-10 years €STR swap market?

- Very mixed views, from «poor» to «fine and will be better»....
- Amongst the more interesting answers:
  - "Liquidity is good, I'd say it's more a question of clients asking for €STR rather than OIS which would push market makers to quote it"
  - "no demand, no liquidity"

QUESTION 3: What is your quick view about the development of this specific 2-10 years market for the rest of the current year?

- 13 out 23 foresee a big inflow to €STR in June after the CCP discounting switch
- 5 out of 23 don’t see a big change in the market composition
- 5 out of 23 didn’t answer !!!!
Key points for Mt €STR based issuances:

- Small number of issuances at the moment
- Significant amounts only for EIB and KFW issuances, with maturity 3 years
- Concentration of issuances immediately after first €STR fixing in Oct-Nov 2019
- Possible and expected increase in second half of 2020, after the yearly update of info memo (including 31 Dec 2019 balance sheet figures)

<table>
<thead>
<tr>
<th>Issuer Name</th>
<th>Nb of €STR bonds issued</th>
<th>Sum of outstanding EUR notional</th>
<th>Date of the first €STR FRN issued</th>
<th>Announcement Date</th>
<th>Tenors</th>
<th>Maturity types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landeskreditbank Baden-Württemberg Foerderbank</td>
<td>1</td>
<td>250,000,000</td>
<td>08-Oct-19</td>
<td>19-Sep-19</td>
<td>2y</td>
<td>BULLET</td>
</tr>
<tr>
<td>European Investment Bank</td>
<td>2</td>
<td>2,000,000,000</td>
<td>10-Oct-19</td>
<td>01-Oct-19</td>
<td>3y</td>
<td>BULLET</td>
</tr>
<tr>
<td>KFW</td>
<td>1</td>
<td>1,000,000,000</td>
<td>21-Nov-19</td>
<td>13-Nov-19</td>
<td>3y</td>
<td>BULLET</td>
</tr>
<tr>
<td>State of Saxony-Anhalt</td>
<td>1</td>
<td>100,000,000</td>
<td>07-Feb-20</td>
<td>27-Jan-20</td>
<td>2y</td>
<td>BULLET</td>
</tr>
<tr>
<td>Grand Total (4 issues)</td>
<td>5</td>
<td>3,350,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source JPM- Bloomberg
€STR – the Ambassador activity for Market development

Market participants (financials, corporates, consumers) must be ready within 2021 for the transition, acting as soon as possible.

The liquidity for €STR based products is growing but further developments are necessary.

For these reasons the Working Group on risk free rates has decided to nominate in each Country at least one Ambassador to facilitate and to speed the Communication process.

Ambassadors Framework

- Concept:
  - Group of spokespeople from within the WG implementing local communication efforts in the respective euro area country in liaison with local authorities and associations

- Mandate:
  - To approach, inform and educate market participants and improve the visibility of the working group through common communication tools
  - To inform local authorities and associations on WG activities, recommendations and reports and explain the need to communicate
  - To encourage local authorities and associations on benchmarks across each euro area countries to implement communication actions

- Roles and responsibilities
  - To promote WG activities at local awareness-raising events, preferably with support from local authorities and associations
  - To organize events at local level using WG materials and publications
  - To translate and adapt publications and information material published by the WG and SG
  - To participate in networking events for the WG Ambassadors
  - To assess local market participants’ communication and education needs with regard to WG related issues
€STR – the Ambassador activity for Market development

The Ambassadors’s Toolkit, discussed and approved at the end of February 2020, is the following:

PACK 1:
to inform readers about the transition from EONIA to €STR, focusing on the key messages regarding products, models, legal, accounting and risk management implications.

- Transition from EONIA to the €STR
- Timeline for the transition from EONIA to the €STR
- Key messages for the transition from EONIA to €STR

PACK 2:
to inform about EURIBOR fallbacks in the context of the interest rate benchmark reform and the recommendations made by the Working Group on Euro Risk Free Rates, as well as to address the need for fallbacks from a regulatory perspective and the work performed by market associations.

- EURIBOR fallback context
- What a fallback provision is and its main elements
- The need for the use of fallbacks
- Regulatory requirements regarding the fallback provision
- Recommendations of the Working Group
- Risk management and accounting considerations

- Other work performed by market associations
PACK 3: to inform readers about the transition due to interest rate benchmark reforms, the use of risk-free rates, and the roles & responsibilities and recommendations of the Working Group on Euro Risk-free Rates

What is happening with regard to IBORs and the new risk free rates
- The role of the Working Group on euro risk-free rates
- Transition from EONIA to the €STR
- Introducing fallbacks for Euribor
- What do market participants need to do?
- International developments and timeline

Working Group on risk-free rates
Frequently Asked Questions

- General benchmark rate questions (based on ECB Explainer)
- Questions on the €STR
- Transition issues
- Questions on fallback rates
- General questions about the working group on risk-free rates and its governance
- Development of term rates and derivative markets
- Link with benchmark developments in other jurisdictions

Working Group on risk-free rates
Monthly Newsletter

Working Group on Euro Risk-Free Rates Newsletter February 2020

This newsletter provides an update on the work of the working group on euro risk-free rates (hereafter the working group or WG), and also refers to developments in international markets. If you have questions about the content or would like to subscribe, please contact CommunicationsEuroRFR@ecb.europa.eu. Feel free to share this newsletter with others!

During the meeting on 4 December 2019, the chair of the working group on euro risk-free rates presented the planning and key deliverables for the first half of 2020.

The working group on euro RFRs is in the process of preparing public consultations on Euribor fallbacks for Q2 2020. The consultations are planned to cover the Euribor fallback rate for different asset classes and any adjustment spread, as well as the events that will trigger the activation of the Euribor fallback rate and relevant market conventions. The working group aims to conclude this work with a set of recommendations on Euribor fallbacks by the summer 2020.