Press release

(For meeting minutes, please see page 3 ff.)

National Working Group on Swiss Franc Reference Rates

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Zurich, 30 September 2020

Executive summary of the 29 September 2020 meeting of the National Working Group on Swiss Franc Reference Rates

The National Working Group on Swiss Franc Reference Rates (NWG) met on 29 September 2020 to discuss the progress of the LIBOR transition in Switzerland and relevant international developments.

The key items and recommendations of yesterday's meeting were:

- (i) FINMA presented the results of their self-assessment survey. The CHF LIBOR tough legacy volume appears to be small and not an existential issue.
- (ii) Regarding the future of CHF LIBOR, the NWG expects that CHF LIBOR will be discontinued at the end of 2021. A synthetic CHF LIBOR is not expected. SNB and FINMA strongly advised users of CHF LIBOR to be completely prepared for the likely discontinuation at the end of 2021. Based on these expectations, the NWG, FINMA and SNB representatives recommended that all market participants (i) should sign up to ISDA's IBOR Fallbacks Protocol as soon as possible, or at the latest by its effective date, (ii) should sign similar protocols for other agreements (such as the Swiss Master Agreement, SMA) as soon as possible, (iii) and should ensure that robust fallback languages are used in all other contracts.
- (iii) NWG members were updated on the increasing supply of SARON-based cash products such as retail mortgages and corporate mortgages loans by various banks. Moreover, SIX informed about the launch of its web-based calculator.
- (iv) An update was given about diverging recommendations in international loan conventions. The meeting attendees discussed two versions of lookback methodologies, namely "shift" and "lag", and flooring conventions. The NWG

1 Given that discontinuation is a decision for LIBOR's administrator and regulator, clarity on a discontinuation would come from respective statements by FCA, in line with its regulatory powers, or by IBA, in line with its published cessation procedure.

- repeated the recommendations to use the "shift" methodology and to floor the compounded SARON, as long as the domestic market is in the focus. In case international consistency is important, the "lag" methodology and flooring individual SARON values are viable alternatives.
- (v) Meeting participants were updated on the fallback language provided by Homburger. It was confirmed that the fallback language includes a cessation and pre-cessation trigger as implemented by ISDA. Furthermore, the fallback rate is compounded SARON with ISDA's spread adjustment, whereas the spread adjustment can also be skipped for simplicity as long as this is in favor of the customer. The fallback language can also be used for bilateral loans with corporates or SME.
- (vi) A discussion was held how clearing houses will handle legacy trades. The conclusion was that consistency across clearing houses and legacy trades in general would be beneficial. By applying the ISDA fallback methodology (backward shift), legacy trades are economically similar but not identical to standard RFR trades (settlement delay). This could lead to a conversion of legacy trades to standard RFR trades sometime after 2021 and highlights the importance of using SARON-based derivatives now instead of CHF LIBOR-based derivatives.
- (vii) The last point on the agenda proposed the publication of additional material on the NWG webpage, namely FAQs.

The minutes of the meeting will be published in due course on the NWG website.²

representative of the Swiss National Bank (SNB). The SNB supports the NWG by co-chairing the working group alongside a representative from the private sector. The NWG publishes recommendations based on consensus. Recommendations are not legally binding. The SNB acts as a moderator. Furthermore, the SNB runs the NWG's technical secretariat and facilitates the organisation of the meetings. In this capacity, the SNB also publishes on its webpage documents discussed by the NWG such as this document. The items published do not necessarily reflect the views of the SNB.

² The NWG is the key forum to foster the transition to SARON and to discuss the latest international developments. The NWG ceases to exist once the transition to SARON is materially completed. The NWG is co-chaired by a representative of the private sector and a representative of the Swiss National Bank (SNB). The SNB supports the NWG by co-chairing the working group alongside a representative of the private sector. The NWG multiples recommendations be sed on personal Recommendations are not lessely.

Minutes of the 29 September 2020 meeting of the National Working Group on Swiss Franc Reference Rates

1. Opening Remarks

- The two co-chairs of the National Working Group on CHF Reference Rates (NWG) welcomed all attendees to the twenty-fifth meeting and reminded them of their responsibilities related to <u>competition law and confidentiality</u>. Due to the ongoing COVID-19 pandemic, the meeting was held again virtually.
- The Swiss Financial Market Supervisory Authority (FINMA) presented the results of the Q1 self-assessment survey together with preliminary results from the Q2 survey. One key result was that the CHF LIBOR tough legacy volume appears to be small and not an existential issue. The main exposure of LIBOR contracts comes from OTC derivatives under standard agreements such as ISDA and SMA. However, FINMA is concerned that banks and securities firms have not yet fully identified their residual LIBOR exposures at risk. As such, the Q3 self-assessment survey will be amended to incorporate detailed questions in order to investigate this further. Additionally, FINMA informed the meeting participants about the still elevated volume of certain CHF LIBOR products maturing after 2021, which is increasing rather than decreasing compared to Q1. In this regard, FINMA highlighted the FINMA "Dear CEO Letter", dated April 2020, in order to encourage proactive action towards alternative risk free rates, including in particular substantial progress in replacing CHF LIBOR-based cash products with SARON-based cash products by the end of 2020.

2. SARON-based cash products

2.1. Market developments

NWG members were reminded of the available options for using compounded SARON and the gravitation towards the three options "Plain", "Lookback" and "Last Reset". Since the last meeting there have been significant developments in the SARON-based cash market. Further banks have launched or announced SARON-based retail and corporate mortgages and in addition, a small portion of those banks is offering SARON-based corporate loans as well.² All those banks use one of the three options mentioned to apply compounded SARON. Importantly, the customer feedback has been very positive so far.

¹ FINMA asked 26 banks and securities firms to perform a quarterly self-assessment during 2020 to monitor LIBOR exposures. The 26 banks cover roughly 99.8% of the LIBOR-based contractual volume in Switzerland maturing after 2021.

² See slide 10. Additionally, Schwyzer Kantonalbank, Bank Linth, Neue Aargauer Bank and Liechtensteinische Landesbank have also launched mortgages based on compounded SARON. Schaffhauser Kantonalbank will offer SARON-based cash products from November 2020.

- A representative from SIX informed the meeting participants that SIX now provides a web-based <u>calculator</u> that allows all users to calculate the compounded SARON for any date combinations. SIX supports now the visibility of compounded SARON by providing this calculator, the SARON Index and the SARON Compound Rates. All three components are available on the SIX <u>website</u>. It was also reported that a transitional provision allows the usage of SARON under the UK Benchmark Regulation without restriction until the end of 2022. SIX will register SARON and other indices and no issues are expected.³
- A representative from the Loan Market Association (LMA) gave an update on their work on documentation and loan market activity. The importance of clear contractual language was emphasized in order to facilitate the conversion to alternative rates before end of 2021. LMA had published an exposure draft of a multicurrency rate switch facility agreement on 11 September, with comments from members requested by 25 September. With this switch facility, market participants can set a date when the contracts will be transitioned to an alternative rate ahead of end 2021. There will be two versions of the switch facility, one will include the "shift" and the other the "lag" methodology. LMA is also working on a multicurrency facility agreement without a switch (i.e. it immediately references risk-free rates). Furthermore, meeting participants were informed about the latest loan activity, where several loans used the "shift" methodology.

2.2. Diverging conventions for loan products across currency working groups

- The meeting participants were briefed on diverging loan conventions across international working groups. There are differences in the lookback methodology, namely "shift" and "lag", and in the flooring conventions. Whereas the conventions are in line for the first point, the NWG has come up with differing recommendations for the last two points. Specifically, the NWG recommended for loan products the lookback option "shift" rather than "lag" and in terms of flooring, the NWG recommended to floor the compounded risk-free rate (RFR) rather than individual rates. To provide context, the chair of the Loan and Deposit (L&D) sub-working group explained the difference between the lookback versions "lag" and "shift". Although the two methodologies handle the weights of the rates differently, the basis is marginal, or less than 1bp on average. The impact of different flooring conventions on the final interest rate were also illustrated. Evidently, flooring individual RFR-values can lead to a higher interest rate compared to flooring the compounded RFR.
- The subsequent discussion led to the conclusion that there are good reasons to leave the recommendations for the domestic market unchanged. As stated in the <u>23rd meeting</u> of the NWG, compounded SARON is used as the contractually fixed interest rate in lending contracts, not the individual SARON rates; hedging is more efficient in case compounded SARON is floored. Furthermore, most cash products in the CHF market are based on a

³ SARON and other indices by SIX were already approved under the EU Benchmark Regulation in February 2020.

⁴ See slides 17 ff.

⁵ The version "shift" is also called "interest period weighted shift" (ARRC and UK RFR WG) or "backward shift" (ISDA).

- constant notional. Therefore, flooring the compounded SARON remains the recommended approach as long as the domestic market is in the focus. However, flooring individual SARON values is a viable alternative if international consistency is needed.
- Regarding the two lookback options, the conclusion was also to leave the recommendation for "shift" unchanged, as long as the domestic market is in the focus. The "shift" methodology is a more natural approach, simplifies a centralized calculation of compounded SARON, is intended to be used by ISDA for its fallback methodology and is used for other SARON-based cash products. The "shift" methodology is also used in other currency areas for cash products. However, "lag" can be preferable in case of intra-period activities such as notional changes or secondary-market trades and some international market participants might only use the "lag" methodology. Therefore, in case international consistency is important, the "lag" methodology is a viable alternative.

2.3. Further guidance on fallback language for cash products

NWG participants were given a recap with regard to the fallback language proposed by Homburger. As discussed in the 24th meeting of the NWG, compounded SARON plus ISDA's spread adjustment can be used as a fallback rate to replace CHF LIBOR in CHF cash products. In order to simplify the fallback and as long as it is in favor for the customer, CHF LIBOR can also be replaced with compounded SARON in cash products, i.e. the spread could be left out. In this meeting there was additional guidance that the proposed fallback language includes a pre-cessation and cessation trigger. Additionally, this fallback language can also be used for bilateral loans with corporates or SMEs. Homburger confirmed that this additional guidance is appropriate. Furthermore, it was stated that compounded SARON used in the fallback language can be calculated, e.g. by using the option "plain", "lookback", or "last reset". To simplify matters, the standardized SARON Compound Rates provided by SIX can be used, e.g. SARON 1M Compound Rate.

3. SARON-based derivatives

- A representative from ISDA outlined the path ahead until the IBOR Fallbacks Protocol will become effective. ISDA will announce the launch as soon as the U.S. Department of Justice (DoJ) sends a positive business review letter and ISDA's work with competition authorities in other jurisdictions is completed.⁶ Then, there will be a two week period until the launch date, where entities can adhere to the protocol in escrow. The supplement and protocol will officially launch after this escrow period and the effective date is likely to be in the second half of January 2021. Adherence will continue to be possible after the effective date.
- Based on this, the private sector co-chair of the NWG reminded and encouraged the meeting participants to sign the protocol in escrow as proposed by ISDA. This is important in order to have a smooth transition towards LIBOR alternatives such as SARON.

⁶ The DoJ has sent such a <u>letter</u> a few days after the meeting and ISDA has <u>announced</u> the launch of the IBOR Fallbacks Protocol for 23 October 2020. The Protocol will become effective on 25 January 2021.

- A representative from the working group OTC reported on the current status of the work done on the Benchmark Amendment Agreement. This document will align the Swiss Master Agreement (SMA) with the soon amended 2006 ISDA Definitions. The working group OTC was established by the Swiss Bankers Association (SBA) and consists of legal counsels from 11 banks. The Benchmark Amendment Agreement and supporting material shall be finalized and published by the SBA as soon as ISDA publishes its documents. SBA's document will be available in English, German, French and Italian.
- A representative from LCH confirmed that LCH is committed to adopt the fallback approach incorporated within ISDA's supplemented 2006 Definition, including for CHF LIBOR. As a result, all trades will fall back to ISDA-specified mechanisms should a discontinuation or loss of representativeness occur. From a legal perspective, outstanding contracts will still be referenced to CHF LIBOR. Furthermore, these contracts will become economically similar but not identical to standard SARON derivatives, as ISDA's methodology is based on a "backward shift" methodology. Should participants not take action in advance, LCH will likely need to employ a mandatory conversion of outstanding CHF LIBOR contracts to standard SARON contracts some time after cessation. The timing remains uncertain and all its actions are subject to regulatory review. In that regard LCH recommends to transition to SARON based contracts ahead of the discontinuation and is currently developing a conversion process for outstanding CHF LIBOR contract.
- A representative from Eurex Clearing reported on the current IBOR transition considerations. It was emphasized that Eurex Clearing acts under its own rule book and that all actions have to be compliant with German law and other regulations that apply to the clearing house. As LCH, Eurex Clearing supports ISDA's supplemented 2006 Definition. Furthermore, Eurex Clearing also currently reviews the possibility of a mandatory conversion of legacy contracts. Eurex Clearing also encourages to leverage voluntary measures ahead of 2021.
- The chair of the Derivatives and Capital (D&C) sub-working group explained, based on ISDA's Document "Benchmark Reform at a Glance", that legacy trades under ISDA documentation will continue to reference to LIBOR. Only the price source will change to the Bloomberg publication of the new all-in fallback rates. As a result, non-cleared LIBOR legacy trades under ISDA documentation will not be identical to standard OIS trades. Furthermore, those legacy contracts are currently not tradeable under the (UK / EU) Benchmark Regulation. Based on the statements given by the representative from Eurex Clearing and LCH, cleared legacy trades might be mandatorily converted to standard OIS trades some time after cessation. Hence, cleared and non-cleared legacy trades might not be identical beyond 2021 and it is currently not clear how the stock of non-cleared legacy trades can be reduced after a discontinuation or loss of representativeness. Therefore, "transitioning now" is still an important recommendation.
- NWG members were updated on the outstanding volumes for CHF LIBOR derivatives cleared by LCH, which remain significant. Nevertheless, the outstanding volume in SARON-based swaps is slightly increasing. Furthermore, the chair of the D&C sub-working group mentioned that standardized term sheets for exotic products currently do not seem necessary but that the sub-working group will continue to follow international developments. He also

mentioned that SIX intends to implement the trading of floating rate notes based on SARON until Q2 2021.

4. LIBOR end-scenarios

- The private sector co-chair of the NWG provided a recap from the last NWG meeting in terms of LIBOR end-scenarios and described the possible timeline. The two scenarios are that LIBOR's administrator (ICE Benchmark Administration, IBA) announces a discontinuation or that LIBOR's regulator (Financial Conduct Authority, FCA) announces the loss of representativeness. In addition, the meeting attendees were given an overview on proposed amendments of benchmark regulations that came up since the last NWG meeting. Most importantly, the UK government proposed to amend the UK benchmark regulation, which would give the FCA enhanced powers. Based on these new powers the FCA could force IBA, in case LIBOR is no longer representative, to change the methodology for LIBOR to a synthetic rate. The NWG concluded that a CHF "Synthetic LIBOR" is not expected.
- The NWG also discussed the future of CHF LIBOR. As the underlying market for CHF unsecured wholesale funding transactions remains nearly inexistent, FCA repeatedly stated not to support LIBOR beyond 2021, SARON-based cash products are increasingly being offered with very positive customer feedback and as the CHF LIBOR tough legacy volume appears to be small and not an existential issue, the NWG expects that CHF LIBOR will be discontinued at the end of 2021. Given that discontinuation is a decision for LIBOR's administrator and regulator, clarity on a discontinuation would come from respective statements by FCA, in line with its regulatory powers, or by IBA, in line with its published cessation procedure. In this regard, SNB and FINMA representatives strongly advise users of CHF LIBOR to be completely prepared for the likely discontinuation at the end of 2021.

5. FAQ: publication of additional material

■ The meeting participants were informed about a set of frequently asked questions (FAQs) that was given as a task at the last NWG meeting. The FAQs consist of three parts. The first section gives an overview of all recommendations for the different products. The second section consists of several questions that were raised by market participants so far. The third section contains a list of additional webpages with further FAQs. Meeting participants are asked to review the material presented until the 6 October. Once the review process is completed, the FAQs will be published on the NWG webpage.⁷

6. Recommendations

 NWG, FINMA and SNB representatives recommend that all market participants (i) should sign up to ISDA's IBOR Fallbacks Protocol as soon as possible, or at the latest by its effective date, (ii) should sign similar protocols for other agreements (such as the Swiss

 $^{^{7}}$ FAQs have been $\underline{\text{published}}$ on the NWG webpage on 9 October 2020.

- Master Agreement, SMA) as soon as possible, (iii) and should ensure that robust fallback languages are used in all other contracts.
- The NWG repeats the recommendation to use the "shift" methodology, as long as domestic market is in the focus. In case international consistency is important, the "lag" methodology is a viable alternative. Furthermore, the NWG also repeats the recommendation to floor the compounded SARON, as long as the domestic market is in the focus. In case international consistency is important, flooring individual SARON values is a viable alternative.
- The NWG clarifies the fallback language for mortgages and recommends this fallback language also for bilateral loans with corporates or SMEs.
- The expectations of the NWG are that CHF LIBOR is discontinued at the end of 2021. Given that discontinuation is a decision for LIBOR's administrator and regulator, clarity on a discontinuation would come from respective statements by FCA, in line with its regulatory powers, or by IBA, in line with its published <u>cessation procedure</u>. A synthetic CHF LIBOR is not expected.
- Hence, "Transition now" is still an important recommendation. This is not only focused on legacy derivatives but also includes the launch of SARON-based cash products by additional lenders and the increased usage of SARON-based derivatives as soon as possible. This includes the implementation of robust fallback language, as also recommended by FINMA and SNB representatives.

7. Next steps

- The finalized version of the FAQ will be made available on the NWG website following its review. Please submit any comments until 6 October 2020.
- Monitor and foster national and international developments regarding implementation and / or usage of compounded term rates in cash products and the adoption of SARON in derivatives markets.
- NWG sub-working groups continue to liaise with other international working groups to align and coordinate efforts, in particular in areas where alignment is beneficial.
- The next NWG meeting is scheduled for 1 February 2021, 15:00-17:00 (CET).

Attendance at the 29 September 2020 meeting

Martin Bardenhewer – Zürcher Kantonalbank, co-chair

Marcel Zimmermann – Swiss National Bank, official sector representative, co-chair

Kpate Adjaouté – HSBC PB (Suisse)

Uriel Amitai – ICE
Pascal Anderegg – ZKB
Christian Bahr – SIX
Roger Baumeler – LUKB

Markus Bieri – SwissACT / LafargeHolcim

Marie-Anne Bourgoz Gorgé – BCGE Nicolas Brügger – SIF

Zoran Celeketic – UniCredit Bank Austria

Christophe Cherdel – BCV

Guillermo De La Fuente – ACTSR / SITA

Maurice De Vecchi – Compenswiss

Robert Eigenheer – Eurofima

Dominik Fehr – UBS

Kevin Ferrier – CA Indosuez

Andreas Franke Eurex Fernando Gardoni **SGKB** Christian Gerber AXA Andreas Giannopoulos Barclays Raffael Goldenberger **Entris** Stéphane Hegi **BCV** David Horner **LCH** Thomas Kolb **SBB**

Soeren Kretschmar – Deutsche Bank Sebastiaan Michel Krist – Raiffeisen Colt-Spenser Lake – UBS Bertrand Lamoureux – Natixis Kim Winding Larsen – ACI FMA

Alfred Ledermann – UBS (Chair L&D sub-working group)

Nicolas Lergier – GKB
Ernst Lienhard – SwissRe
Kam Mahil – LMA
Bruno Marin – BNP
Jonathan Martin – ISDA
Davide Masi – Eurex

Jürgen Maurer – Erste Group Bank AG

Elizabeth McGowan – Wells Fargo

Neil McLeod – Erste Group Bank AG Franklin Meimoun – Union Bancaire Privée

Claudio Menghi – Nestlé
Christian Michel – ZKB
Paolo Monticolo – Zurich
Kalina Natcheva-Acar – Eurex
Claus Neumeier – SwissLife

Michael O'Donovan – Zurich Jacques Piasko – Julius Bär Daniel Puskas – Credit Suisse Thomas Miguel Reeg – J. Safra Sarasin

Daniel Rohner – ZKB

Félix Roudier – Credit Suisse (Chair D&C sub-working group)

Daniel Schenker – ZKB
Christof Schlenk – BKB
Roland Schwab – Postfinance
René Schwyzer – LGT

Kevin Sibold – Neue Aargauer Bank AG

Andrea Surro – EFG Bank
David Tornare – BNP Paribas
Pierre-Henri Turc – BCGE
Hugues Weil – Credit Suisse

Philip Whitehurst – LCH

Matthias Wyder – Credit Suisse

Anne Feidt - Swiss Financial Market Supervisory Authority (FINMA)

Paul Koether - Swiss Financial Market Supervisory Authority (FINMA)

Roman Baumann - Swiss National Bank, official sector representative

Luca Freiermuth - Swiss National Bank, official sector representative

Basil Guggenheim - Swiss National Bank, official sector representative

Tanja Zehnder - Swiss National Bank, official sector representative

National Working Group on CHF Reference Rates

25th Meeting, 29 September 2020

Agenda

- 1. Opening remarks and results of FINMA's self-assessment
- 2. SARON-based cash products
 - a) Markets developments
 - b) Syndicated loans
 - c) Further guidance on fallback language for cash products
- SARON-based derivatives
 - a) Market developments
 - b) Transition of the legacy swap book
- 4. LIBOR end-scenarios and fallback language
 - a) Benchmark Regulations
 - b) LIBOR end-scenarios
- FAQ: publication of additional material
- 6. Recommendations and next steps

1. Opening remarks



LIBOR replacement - Update by FINMA

Incl. Q1 self-assessment results

29.09.2020



Results from the Q1 self-assessment (Q1 SA)

Background:

• FINMA asked 26 banks and securities firms to perform a quarterly self-assessment during 2020 to monitor LIBOR exposures. The 26 banks cover ~99.8% of the LIBOR-based contractual volume maturing after 2021.

Key results:

- The CHF LIBOR tough legacy volume appears to be small and not an existential issue. It focuses in particular on retail loans (reported by 1 bank) and floating rate notes (reported by 2 banks). Only 4 banks reported potential tough legacy exposures.
 - Technically **retail loans** do not constitute tough legacy; however, they may be considered as such given the large number of contracts that need to be amended or converted, timing issues, and non-responsive clients.
 - Floating rate notes, however, may be more problematic, e.g. if note issuers do not take steps to amend the notes or note holders are non-responsive.
 Counterparty outreach is essential.
- The largest part of the LIBOR exposure after 2021 (81.4%) comes from **OTC derivatives** (in particular USD, followed by CHF and GBP), of which 99.85% fall under standard agreements such as ISDA and SMA. Adherence to fallback protocols is thus essential where proactive unwinding is not possible.
- As **impediments to the proactive unwinding of legacy LIBOR positions**, respondents most often cited the lack of international standards and different levels of progress by national working groups, system readiness, counterparty reluctance and lack of market liquidity of RFR-based products. 40% of respondents did not identify any impediments.
- The interpretation of tough legacy **differed significantly** across respondents. There was a tendency to either conservatively report entire product classes (e.g. OTC derivatives under ISDA) as tough legacy or nothing at all.
- FINMA does not yet feel certain that banks and securities firms have fully identified their residual LIBOR exposures at risk. Therefore, new questions will be added to the Q3 SA to improve the identification of the tough legacy contracts and enable a clearer understanding of root causes for the classification as tough legacy.
- FINMA encourages banks and securities firms to review the full aggregated Q1 self-assessment results (provided in the appendix) as a **benchmark**, in order to identify potential remaining gaps.



Indicative results from the Q2 self-assessment (Q2 SA)

- The Q2 self-assessments were submitted by end of August, 2020. The analysis incl. data clean-up is ongoing.
- First indications are that the volume of certain **CHF LIBOR** products maturing after 2021 is **increasing compared to Q1**. This is the case for CHF OTC and ETD derivatives, corporate loans and mortgages, syndicated loans, securitizations, deposits, floating rate notes and "other" products".
- Among these, the volume of products <u>without</u> fallback options or other written agreements is also increasing compared to Q1 for CHF ETD derivatives, deposits, floating rate notes and "other" products.
- These volumes should by now be decreasing instead of increasing.
- In this context FINMA highlights again the following excerpt of the FINMA Dear CEO Letters expectations, dated April 2020 (refer to the NWG dated 7 May 2020):
 - Substantial progress in replacing CHF LIBOR-based cash products with SARON-based cash products by the end of 2020. This implies:
 - Substantial reduction of CHF LIBOR-based cash products without robust fallback terms or a written agreement setting out the alternative reference rate after 2021; and
 - o Introduction of robust fallback terms for new CHF LIBOR-based cash products mature after 2021. [...]
 - Proactive action toward issuing new products and entering contracts based on alternative reference rates. In this context, FINMA points
 out that SARON-based derivatives are already being traded and welcomes the milestones achieved by first banks in launching SARONbased cash products.

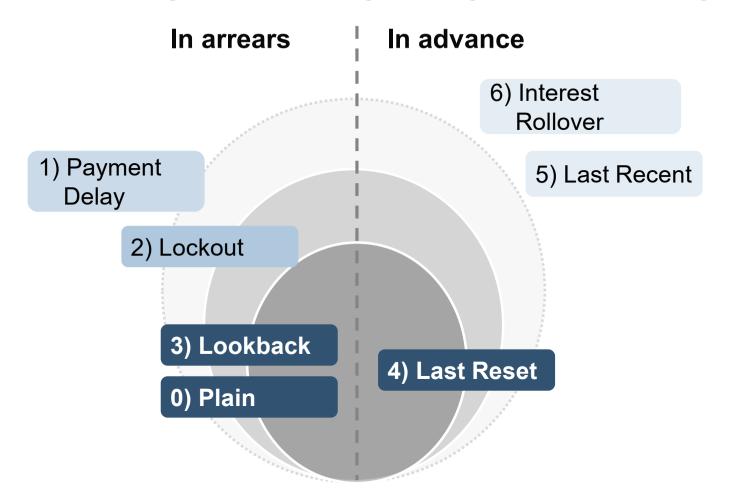
2. SARON-based cash products

Topics

a) Market developments

- -SARON cash market
- Update by SIX
- Update by LMA
- b) Diverging conventions for loan products across currency working groups and potential need to adjust NWG recommendations for lookback methodology
- c) Further guidance on fallback language for cash products

Further guidance regarding options using compounded SARON



- Discussions on national and international level on loan options is currently centered around options 0), 3) and 4)
- Preference varies according to client segments and currencies
- For a detailed assessment please also see the <u>NWG Slides</u> from February 2019

Institutions should individually define their product strategy given the guidance on options using compounded SARON

SARON based cash products: Client feedback so far very positive

	Retail Mortgages	Corporate Mortgages	Corporate Loans
<u>0) Plain</u>	0 0		•
Bank Cler	✓	✓	
 Basellandschaftliche KB 	✓		
 Basler KB 	✓	✓	✓
• CS	\checkmark	✓	
 Raiffeisen Schweiz 	\checkmark	✓	✓
• UBS	✓	✓	
3) Lookback (with observations shift)			
 Clientis (5 calendar days) 	✓	✓	
 Glarner KB (5 calendar days) 	✓	✓	✓
 Luzerner KB (2 business days) 	✓	✓	✓
 Schaffhauser KB*, ** (3 business days) 	s) 🗸	✓	✓
 St. Galler KB (5 calendar days) 	✓	✓	\checkmark
 ZKB (2 business days) 	✓	\checkmark	
4) Last Reset			
• CS	✓	✓	
WIR Bank*	✓	\checkmark	
* T			

^{*} The launch has been announced and is expected to take place in 2020.

^{**} The standardized compounded SARON provided by SIX is used, i.e. SARON 1M Compound Rate.

SIX data offering for SARON completed



A daily interest rate in Swiss Francs for the overnight term. E.g. CHF SARON: -0.75%



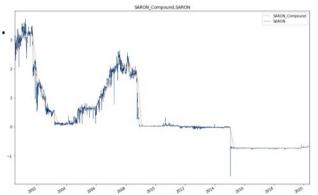
Interest rate that compound the daily overnight rate for pre-defined periods. E.g. SARON 1, 3 or 6 months Compound Rate: -0.74%

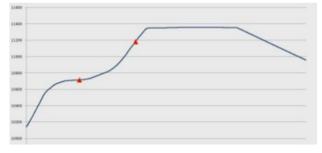


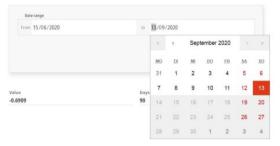
An index that reflects a daily compounding of the overnight rate expressed in index points. SARON Index: 10954.09 index points



A web-based calculator on the SIX website that allows private users to calculate the compounded SARON for flexible date combinations (including non-business days)





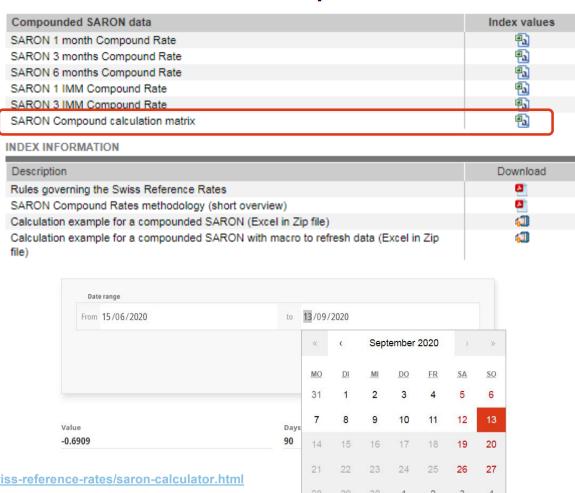




Enhancements - update September 2020

- Compound Matrix which supplies the compounded SARON for all business day and non-business day combinations of the last 12 months
- SIX went live with a **new website**. The public content and descriptions around SARON are (going to be) moved to the new website while the Index Data Center (restricted data) remains unchanged.
- Calculator for a compounded SARON on the new SIX website publicly available since 15 September 2020 for nonprofessional users, built-in delay of 3 business days
- UK Benchmark Regulation transitional provisions for non-UK benchmarks, permitting them to be used in the UK without specific authorisation until the end of 2022.

SARON Compound Rates



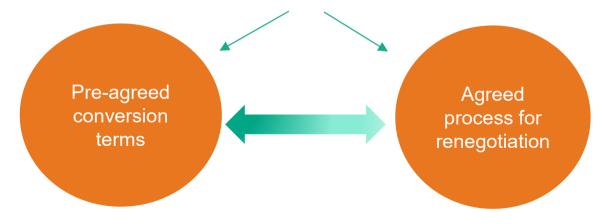
https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/indices/swiss-reference-rates/saron-calculator.html



LMA Update - documentary recommendations

Sterling RFR Working Group

After the end of Q3 2020 lenders, working with their borrowers, should include clear contractual arrangements, in all new and re-financed £LIBOR loan products to facilitate conversion ahead of end-2021



Where "pre-agreed conversion terms" not feasible, parties should "aim to come as close to this as possible"

ARRC

From 30 September 2020 and to the extent not already utilised, new USD LIBOR syndicated loans should include ARRC recommended (or substantially similar) hardwired fallback language. Updated language published on 30 June 2020 with a modified rate waterfall:



Agent authority to decide "conforming changes", including frequency of interest periods, break costs, length of lookback period, etc.

LMA update – LMA documentation developments

The LMA continues its work on documentation for the transition, including to meet the documentary recommendations

LMA work on RFR documentation suite LMA August 2020 note on revised replacement of screen rate clause and £RFR WG documentary recommendations

Exposure draft multicurrency rate switch facility agreement published on 11 September for comments (NB: meets "pre-agreed conversion terms" and could assist with transitioning legacy loans)

The LMA will be producing separate versions for lookback without observation shift and with observation shift to facilitate choice by market participants

The LMA is working on a day one multicurrency RFR facility agreement as well as other transition documentation, e.g. term sheets and updates to existing exposure drafts

Legacy transition – reference rate selection agreement, but no intention to produce form of amendment agreement

LMA update – compounded RFR loans in practice

Date	Borrower	Amount / Tenor	Lender(s)	RFR construction	Observation shift	Interest periods	Credit adjustment spread
Aug 2020	GlaxoSmithKline (GSK)	£1.9bn (3 years); US\$2.5bn (364 days)	12 bilaterals	Compounded in arrears; 5 banking days lookback	No	1 month only	Fixed at outset using ISDA 5 year median
Jul 2020	Coastline Housing	£30m (5+1+1 years)	Lloyds	Compounded in arrears; 5 business days lookback	No		
May 2020	Associated British Ports (ABP)	£150m (2 years)	4 bank club	Compounded in arrears; 5 business days lookback	Yes	3 months only	Fixed at outset using ISDA 5 year median
Apr 2020	Riverside Group	£100m (5 years)	Lloyds	Compounded in arrears; 5 business days lookback	Yes		
Mar 2020	British American Tobacco (BAT)	£3bn (364 days); £3bn (5 years) (Currencies: £, \$, €)	21 bank syndicate	Compounded in arrears; 5 business days lookback	Yes	1 month only	Fixed at outset using ISDA 5 year median
Dec 2019	Shell	US\$8bn (5 years); US\$2bn (1 year)	25 bank syndicate	Compounded in arrears; 5 business days lookback	Yes	1 month only	Fixed at outset

See LMA "List of RFR referencing syndicated and bilateral loans" for more deals: https://www.lma.eu.com/libor

Topics

- a) Market developments
 - -SARON cash market
 - Update by SIX
 - Update by LMA
- b) Diverging conventions for loan products across currency working groups and potential need to adjust NWG recommendations for lookback methodology
- c) Further guidance on fallback language for cash products

Diverging conventions for loan products (1/2)

Term rate methodology:

compounding

simple

Lookback options:

lag

shift

Flooring conventions:

Floor each RFR ...

...compounded RFR

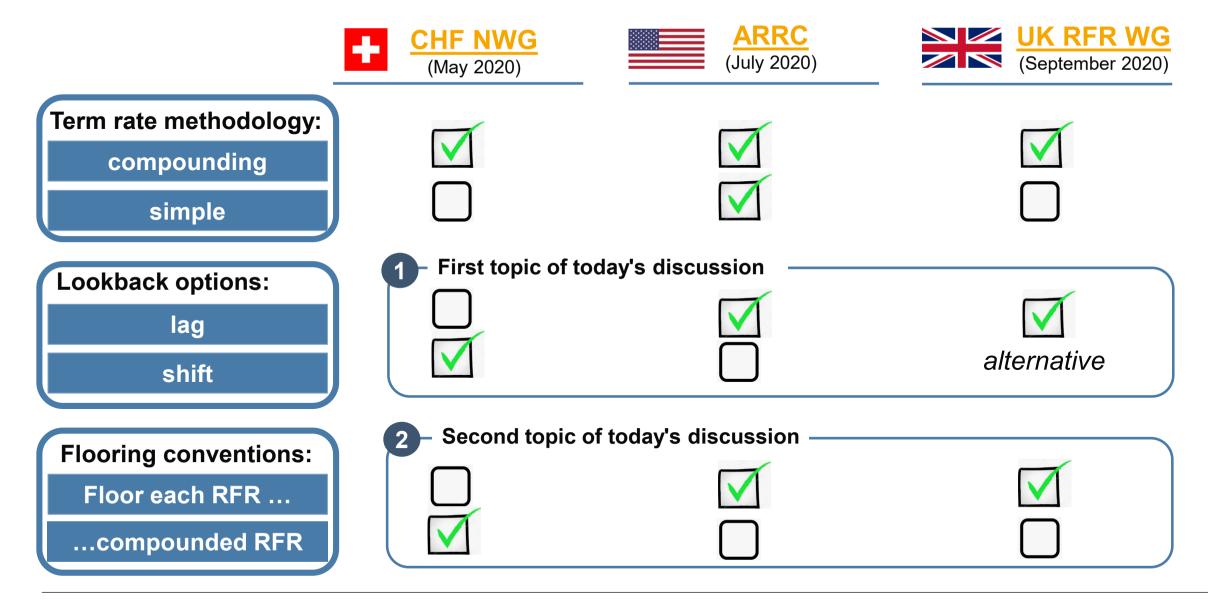
Key considerations

The term rate can be calculated with a simple average (easily implementable) or by compounding the ON rate (precise and in line with derivatives, but slightly more complex).

In case of a lookback, the term rate can be calculated by either using a "lag" or a "shift" methodology. The difference is in the weighting of the lookback rates. The basis is marginal (less than 1bp).

A floor can either be applied to the term rate (i.e. compounded RFR) or to each RFR observation. Different results in case SARON is moving above and below the floor-level within one interest period.

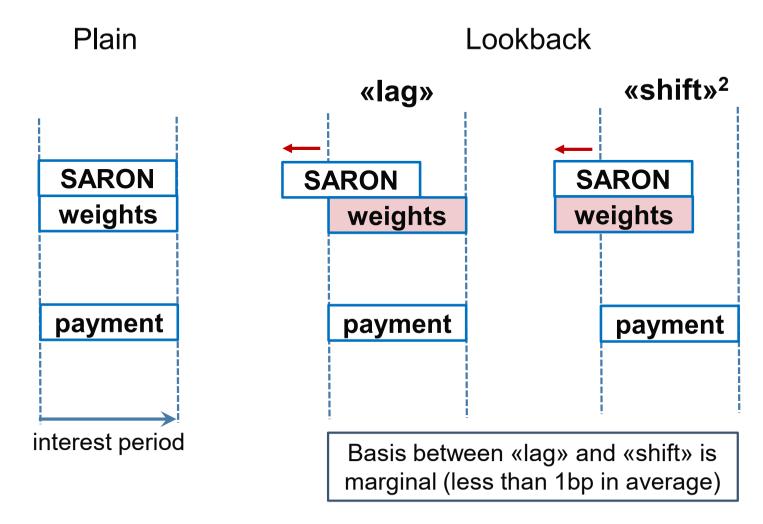
Diverging conventions for loan products (2/2)



■ Background - the two versions of Lookback¹ (1/2)

Step 1: Calculation of compounded rate in p.a.

Step 2: Calculation of **interest rate payment**



¹ Please note that there are even <u>further versions</u> of the Lookback such as a "shift" without calculating a p.a. rate or by using an imputed rate.

² Also known as «interest period weighted shift» (ARRC and UK RFR WG) or «backward shift» (ISDA).

1 Background - the two versions of Lookback (2/2)

SARON

-0.705516

-0.704682

lag

Date

Fr 14.08.2020

Tu 25.08.2020

Mo 17.08.2020 1 -0.704272

Tu 18.08.2020 1 -0.703763

We 19.08.2020 1 -0.702819

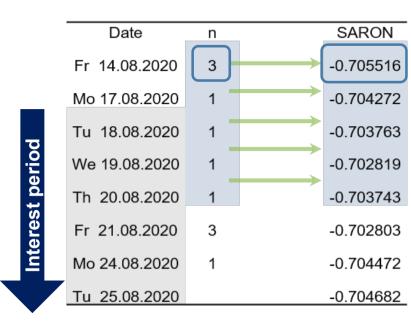
Th 20.08.2020 1 -0.703743

Fr 21.08.2020 3 -0.702803

Mo 24.08.2020 1 -0.704472

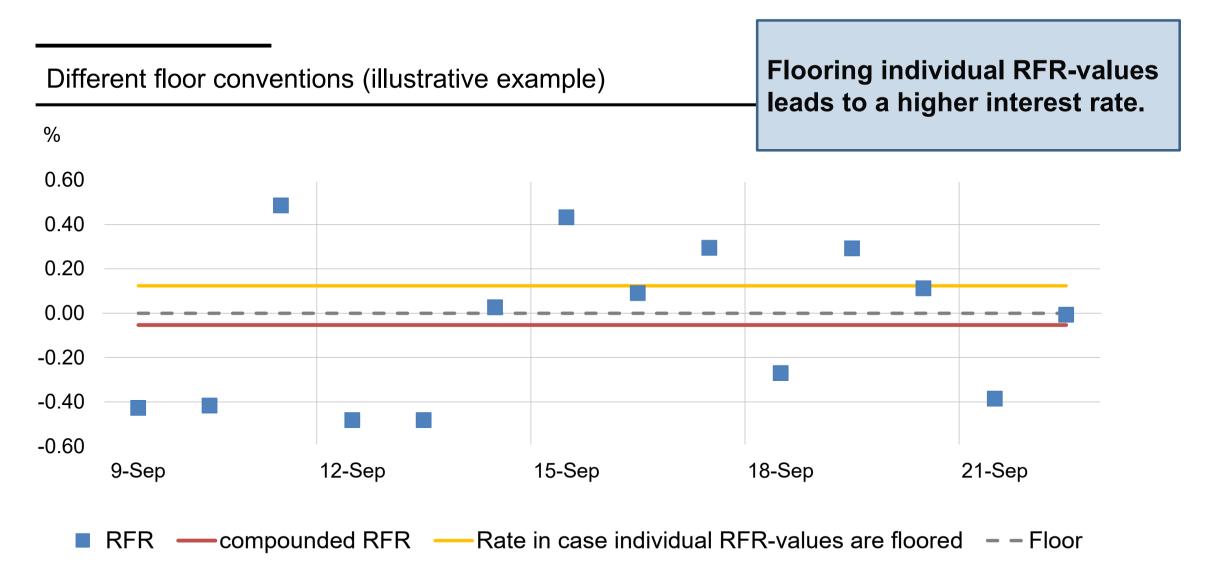
n

shift



- In this example with an offset of two business days, the SARON-value on the 14th August is weighted with "one" in the lag version and with "three" in the shift version.
- The weighting of "three" (i.e. the shift-version) is more "natural".
- In case three month interest periods are used (see appendix), the difference between shift and lag is
 less than 1 basis point even during volatile times of SARON and an offset of three business days.

2 Background – Flooring conventions



Wheed for alignment with international loan market conventions

Situation

- Version «shift» and flooring of the compounded SARON is so far used in the domestic loan market
- Diverging conventions for USD & **GBP**
- Strong preference for international consistency for syndicated loans
- Strong preference for unchanged recommendations for the domestic market

		Lookback	Flooring		
	Domestic mortgages	Shift so far used; in line with NWG recommendation	Flooring of compounded RFR		
>	Domestic corporate loans	Shift so far used; in line with NWG recommendation	Flooring of compounded RFR		
	Multi-currency facilities	No transaction yet			
	Syndicated loans	No transaction yet			

Is there a need to align lookback and flooring recommendations with international conventions?

Recommendations for syndicated loans (lookback options)



The NWG repeats the recommendation to use the "shift" methodology, as long as the domestic market is in the focus. In case international consistency is important, the "lag" methodology is a viable alternative.

Reasoning:

- The difference between "lag" and "shift" is marginal (in average less than 1bp, see appendix).
- "Lag" can be preferable in case of intra-period activities such as notional changes or secondary-market trades.
 In the domestic market, the notional remains usually constant.
- "Shift" allows to simplify a centralized calculation, e.g. the usage of SARON Index or SARON Compound Rates.
- "Shift" is used for ISDA's Fallback rates and for other SARON-based cash products.
- International market participants might only use the "lag" methodology. Hence, for syndicated loans "lag" can be relevant.

²Recommendations for syndicated loans (flooring conventions)¹

The NWG repeats the recommendation to floor the compounded SARON, as long as the domestic market is in the focus. In case international consistency is important, flooring individual SARON values is a viable alternative.

Reasoning:

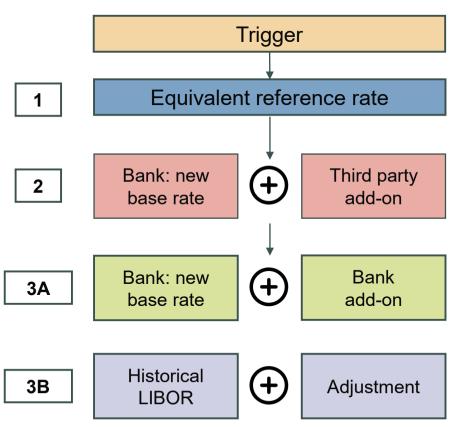
- Compounded SARON is used as the contractually fixed interest rate in lending contracts, not the individual SARON rates.
- Hedging (e.g. caps and floors) is more efficient in case compounded SARON is floored.
- Flooring the compounded SARON is suitable for products with a constant notional, which is true for most cash
 products in the CHF market.
- International market participants might floor individual RFRs. Hence, for syndicated loans flooring the individual
 values can be relevant.
- International market participants can be expected to be fully aware of the fact that flooring the individual values might lead to a higher compounded rate.

¹ The following recommendation remains unchanged. "Market participants are free to decide whether a floor is applied and at which level this floor is applied."

Topics

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Fallback language proposed by Homburger



1 In case that CHF-LIBOR [is no longer available as recognized reference rate | is no longer published], the parties agree that BANK will determine the interest rate on the basis of another reference rate that is economically as equivalent as possible. Equivalent may in particular be recognized reference rates that are calculated with a view to provide a value-neutral replacement for CHF-LIBOR denominated loans.

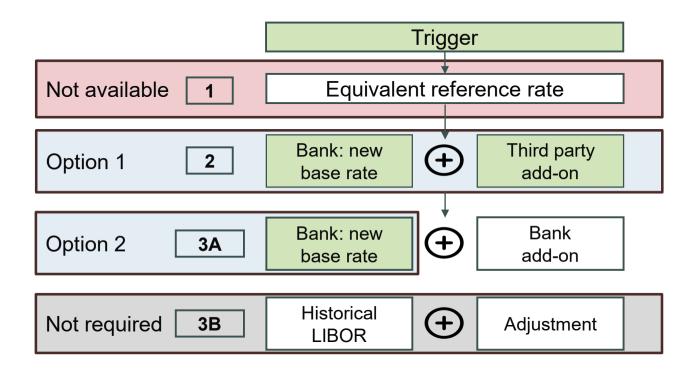
2 Is no such an equivalent reference rate available from a third party, and there neither is a recognized addition or deduction for an economically neutral replacement of CHF-LIBOR published, then [Alternative A: BANK shall itself determine an addition | deduction and applies this in fixing the new reference rate.] [Alternative B: the new interest rate will be determined by reference to the [average] [median] historic CHF-LIBOR rates for the last ■ bank working days prior to the discontinuation of CHF-LIBOR, adjusted to reflect the general interest rate fluctuations since the discontinuation of the CHF-LIBOR.]

3 The new reference rate will be applied for the first time for the immediately following interest period. Should the disappearance of CHF-LIBOR time-wise be very close to the commencement of the immediately following interest period, BANK may utilize for such interest period an interest rate that is based on the last available CHF-LIBOR rate.

More clarity on fallback design for CHF cash products

- At the last NWG meeting it was recommended to consider the usage of a pre-cessation trigger. As it turns out, this recommendation supports the alignment with ISDA's fallback language and therefore between cash and derivatives contracts
- ISDA's envisaged spread calculation plus compounded SARON could be seen as an appropriate fallback rate to replace CHF LIBOR in CHF cash products
- In order to simplify the fallback and as long as it is in favor for the customer, CHF LIBOR can also be replaced with compounded SARON in cash products, e.g. the spread could be left out
- Flooring: If CHF LIBOR is floored in the contract, then it seems suitable to floor ISDA's spread plus compounded SARON

Further Guidance on fallback language (confirmed by Homburger)



Trigger: In case that CHF-LIBOR [is no longer available as recognized reference rate (pre-cessation trigger) | is no longer published (cessation trigger)], ...

Fallback rate Option 1: Compounded SARON plus ISDA's spread adjustment

Fallback rate Option 2: Compounded SARON without spread (in order to simplify the fallback and as long as it is in favor for the customer)

This fallback language (proposed for retail loans, e.g. mortgages) can also be used for bilateral loans with corporates or SME.

How "compounded SARON" can be calculated as a Fallback rate

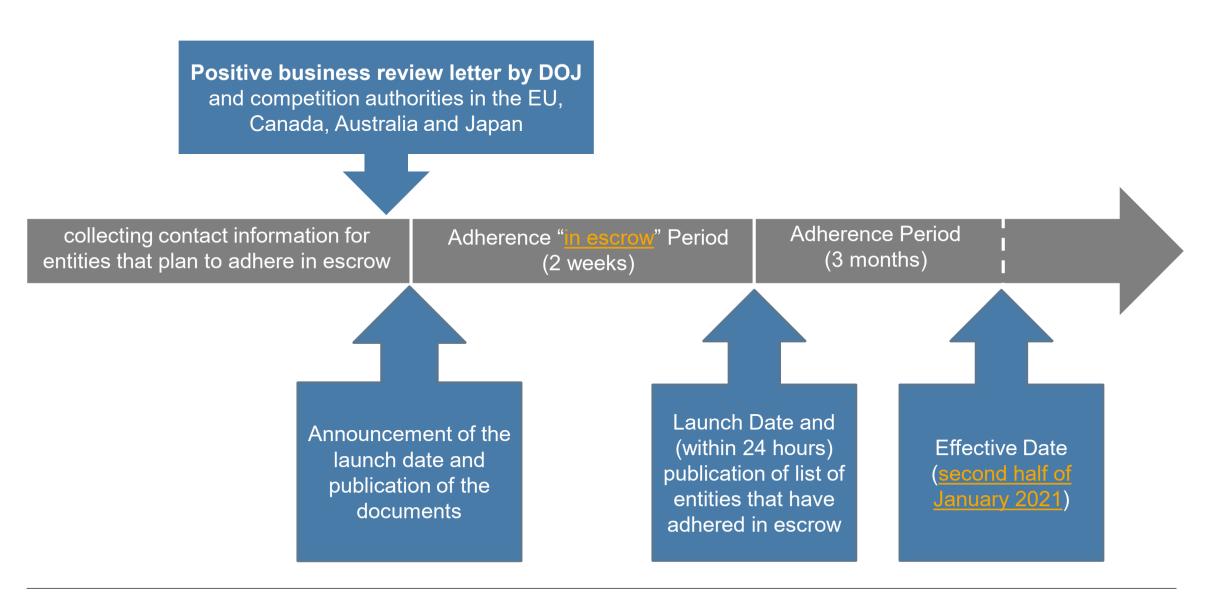
Compounded SARON can be calculated e.g. by using the option «plain», «lookback», or «last reset». To simplify matters, the standardized SARON Compound Rates provided by SIX can be used, e.g. SARON 1M Compound Rate.

Reasoning:

- The option "last reset" is reasonable in case the interest payment has to be known at the beginning of the interest period.
- The current ISDA spread adjustment for CHF 3M LIBOR is very close to zero (between 0 and 0,5 bp).

3. SARON-based derivatives

Current timeline of ISDA Fallback documents (2006 Definitions)



Update on SBA's approach for the Swiss Master Agreement (SMA)

Working Group OTC

- -The Working Group OTC is a working group consisting of legal counsels from 11 banks, hosted by the Swiss Bankers Association (SBA).
- Regarding the LIBOR cessation, the Working Group OTC follows the approach taken by ISDA.
 Attorney Olivier Favre from Schellenberg Wittmer was appointed by SBA / Working Group OTC to prepare several documents as a bridge between the Swiss and the international documentation (next slide).

-Timeline:

- -The Working Group OTC expects ISDA to publish the supplement to the 2006 ISDA Definitions and the ISDA IBOR Protocol soon
- -The Benchmark Amendment Agreement (former definition: Swiss IBOR Appendix), the related FAQs and the Supplemental Interest Rates, Risk Free Rates (RFR) and EONIA Definitions (the SBA IBOR Documentation) shall be finalised and published by the SBA as soon as possible thereafter
- -The SBA will publish such SBA IBOR Documentation on its website in English, German, French and Italian

Update on SBA's approach for the Swiss Master Agreement (SMA)

Approach of Working Group OTC

Benchmark Amendment Agreement

- Applicable to Swiss Master Agreements (bilateral amendment agreement)
- Cross-reference to ISDA IBOR Protocol (including same triggers for fallbacks and same fallbacks as used in ISDA IBOR Protocol, inlcuding pre-cessation trigger)
- Possible to sign such agreement in addition to adherence to ISDA IBOR Protocol
- Incorporating supplemental definitions for EONIA cessation and trading in risk-free rates (RFRs)

- FAQs

- Shall provide guidance on the use of the Benchmark Amendment Agreement
- Will briefly outline of fallback rates that would apply upon a trigger being effective
- Supplemental Interest Rates, Risk Free Rates (RFR) and EONIA Definitions
 - Supplement to be incorporated into any Master Agreement, Credit Support Document and Transaction where any amounts are calculated by reference to floating interest rates or fixed interest rates.

Transition of the legacy swap book

From the ISDA Document "Benchmark Reform at a Glance"

- -6: If the permanent cessation fallbacks are triggered and apply, the terms of the confirmation will remain exactly the same. Specifically, this means:
 - The floating rate option referenced in the contracts will remain unchanged (e.g. US dollar) LIBOR contracts will continue to reference USD-LIBOR-BBA, but the price source within the description of USD-LIBOR-BBA will move to the Bloomberg publication of the new all-in fallback rates based on SOFR). As a result, the floating rate option will differ from OIS referencing the RFRs.
 - The other conventions (e.g. payment dates, day count, payment frequency) for the original IBOR derivative will remain the same. As a result, the conventions will differ from OIS referencing the RFRs.
 - However, in accordance with the terms of the new fallbacks embedded in the floating rate options, the observation date will generally move to a date that is around the end of the relevant period.

LCH: Potential approach to new & legacy CHF LIBOR swap contracts

- LCH has for some time been committed to adopting the fallback approach incorporated within ISDA's supplemented 2006 Definition, including for CHF LIBOR¹
- As a result, LCH-cleared swaps will be primed to fall back to the official Bloomberg Fallback rate as soon as ISDA has "published" (made available) this capability
- This will apply automatically to new trade registrations going forward from that date. LCH will use its rulebook powers to apply the same change to legacy contracts
- Should a fallback then be triggered, outstanding contracts will remain referenced to CHF LIBOR but will become economically similar to standard CHF OIS, though not identical
- For regulatory reasons, LCH may not be able to maintain such contracts for long periods
- A mandatory conversion of outstanding CHF LIBOR contracts some time after cessation is likely to be necessary. The conversion to standard SARON contracts is a possibility.
 Timings are uncertain and actions are subject to regulatory review
- Voluntary compression to reduce the stock of outstanding LIBOR trades is recommended

¹ https://www.lch.com/membership/ltd-membership/ltd-member-updates/lchs-position-respect-isdas-recommended-benchmark

Eurex Clearing – IBOR transition considerations

Background

- A potential LIBOR cessation scenario is expected to occur at or around the end of 2021.
- Private sector working groups and industry associations are developing frameworks and recommendations to lay the ground for a stable and consistent transition.
- This is an important input into the actual transition efforts of market participants and infrastructure providers like CCPs aiming at convergence ("best-practice").
- ISDA has developed a fallback framework for benchmarks and concrete fallbacks for certain IBORs ("IBOR fallbacks") and is in the process of amending its definitions.

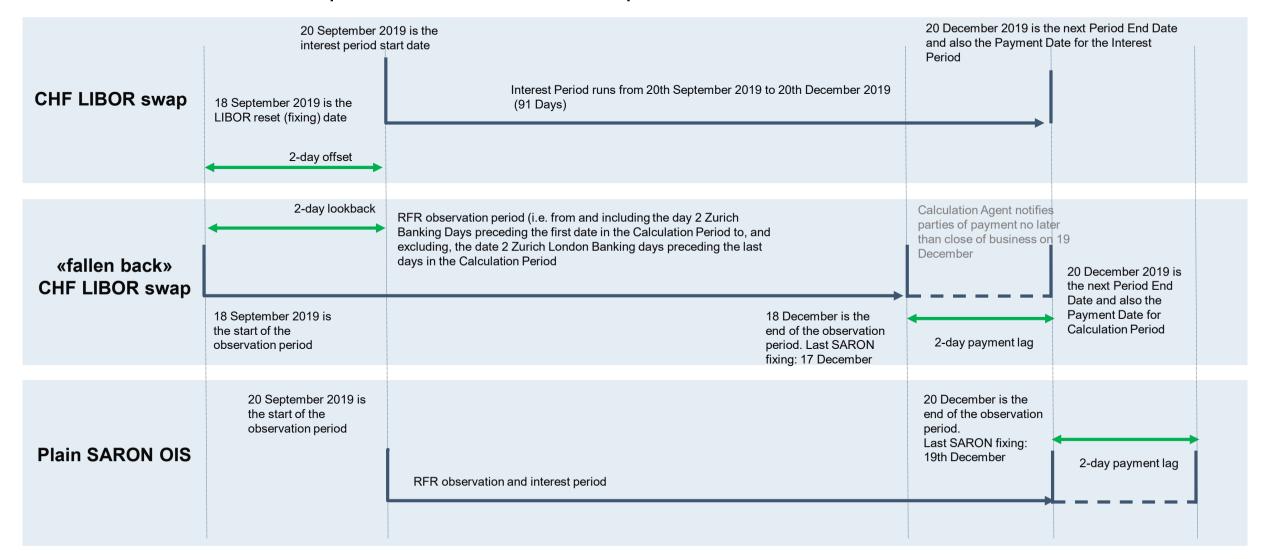
Cleared derivatives routes

Eurex Clearing

- Eurex Clearing operates under its own rule book and acts in accordance with German law as well as any regulation that applies to the clearing house.
- Eurex Clearing's rules include a fallback framework and respective references to ISDA.
- "Fallback route" use ISDA fallbacks published by Bloomberg (operational transition):
 - Congruence between cleared and bilateral market expected (where applicable)
 - Contractual transition backed by an industry wide consultation effort
 - Contracts still contain the phrase "Libor" regulatory concern? Fungibility? FRAs?
- "1-step conversion" cancel and re-book all trades mandatorily (legal transition)
 - Convert all cleared Libor portfolios to RfRs / stop accepting Libor trades
 - Operationally challenging and legally more intrusive than fallbacks routes
- "Compression" complement efforts with services to reduce Libor exposures

Transition of the legacy swap book

"Fallen back" LIBOR swaps will not be identical to plain SARON OIS



Conclusion

- -At the moment, legacy contracts can not be traded under (UK / EU) BMR.
- -Consultations by clearing houses are recommended and to be expected.
- Consistency in the treatment of fallen back swaps across clearing houses would be beneficial.
- Voluntary compression ahead of end-2021 is recommended.
- Mandatory conversion thereafter could be expected.

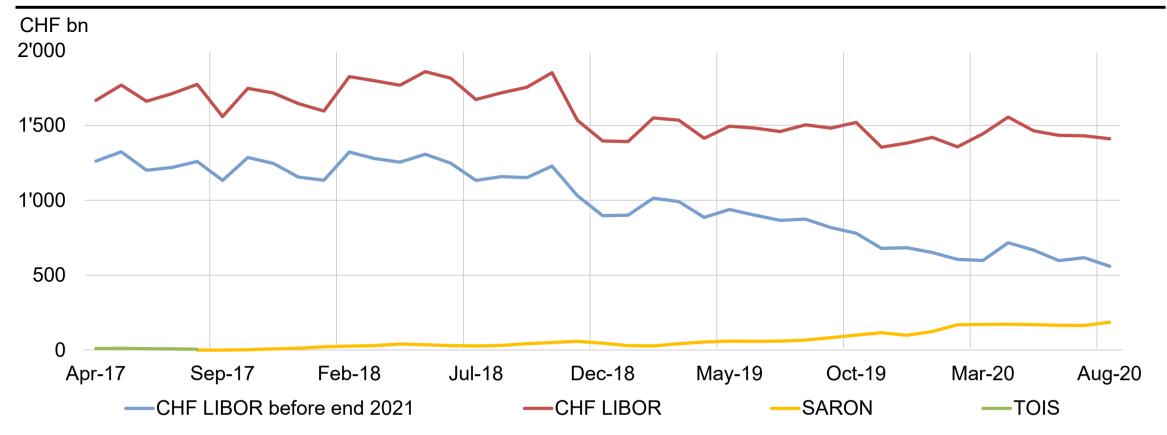
This could result in small economic mismatches between currently hedged portfolios.

«Transition now» is still an important recommendation

Outstanding volumes for CHF LIBOR derivatives remains significant

OUTSTANDING DERIVATES CLEARED BY LCH (END OF MONTH)

Numbers are divided by two, as both legs of one economic trade are reported by LCH Volumes reported are over all tenors and all products (OIS for SARON and e.g. IRS, Basis, and FRAs for LIBOR)



Sources: SNB, LCH Clearnet

Further elements discussed in the sub-working groups since last NWG meeting

Standardized term sheets for exotic products do not currently seem necessary.
 The D&C sub-working group will continue to follow international developments.

-According to SIX, trading of SARON FRN will be implemented until Q2 2021.

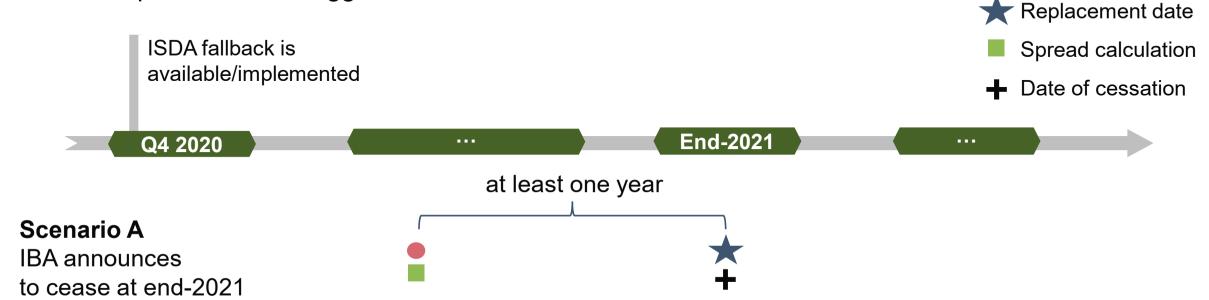
4. LIBOR end-scenarios

Recap NWG 24

Announcement date

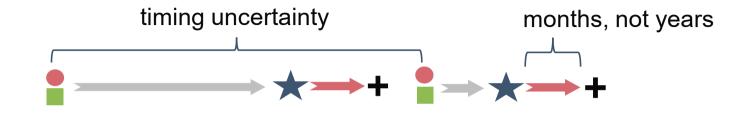
Timing of the scenarios

applicable for any currency-tenor pair and by assuming that ISDA fallback includes a pre-cessation trigger



Scenario B

FCA announces loss of representativeness



Overview on proposed amendments of benchmark regulations

- The ARRC <u>released</u> a proposal for **New York State legislation**, which is intended to minimize legal uncertainty and adverse economic impacts associated with LIBOR transition.
- The **UK Government** published a <u>statement</u> with regard to its progress on LIBOR "end game" and proposed legislation. The legislation would build on the existing regulatory framework contained in the Benchmark Regulation in order to give the FCA enhanced powers to help manage and direct an orderly wind-down of critical benchmarks such as LIBOR, and in particular help deal with the problem identified by the Sterling Risk Free Rate Working Group of '<u>tough legacy</u>' contracts that cannot transition from LIBOR. The FCA has also published its own <u>statement</u>.
- The European Commission has proposed to amend the EU BMR so that the EU Commission could replace any reference to LIBOR with a reference to a suitable replacement rate.

Synthetic LIBOR

Tough legacies are tough because these contracts cannot be renegotiated or amended.

New proposed powers by the FCA

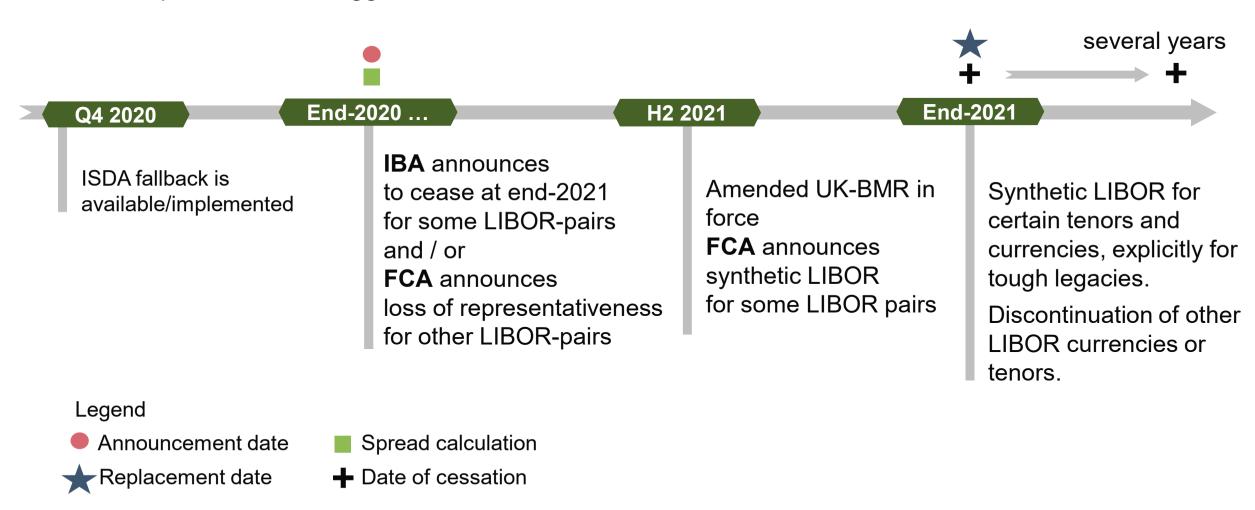
- If LIBOR is no longer representative and its representativeness will not be restored, the FCA will have the power to require modification of the methodology.
- A synthetic LIBOR will only be allowed to be used in tough legacy contracts.

Methodological change may not be feasible (lack of robust input data in the relevant currency), and instead publication may cease.

Therefore, a CHF "Synthetic LIBOR" is not expected.

Timing of the scenarios

applicable for any currency-tenor pair and by assuming that ISDA fallback includes a pre-cessation trigger



Future of CHF LIBOR

Background

- Underlying market for CHF LIBOR remains nearly inexistent.
- FCA will no longer support LIBOR beyond 2021.
- "There could be announcements by the end of 2020 of cessation of settings at the end of 2021."
 (see <u>speech</u> by Edwin Schooling Latter, July 2020)
- SARON-based cash products are increasingly being offered and customer feedback is very positive.
- CHF LIBOR tough legacy volume appears to be small and not an existential issue.

Therefore, the expectations of the NWG are that CHF LIBOR will be discontinued at the end of 2021. Given that discontinuation is a decision for LIBOR's administrator and regulator, clarity on a discontinuation would come from respective statements by FCA, in line with its regulatory powers, or by IBA, in line with its published cessation procedure. A synthetic CHF LIBOR is not expected.

SNB and FINMA representatives strongly advise users of CHF LIBOR to be completely prepared for the likely discontinuation at the end of 2021.

5. FAQ: publication of additional material

Product	New Products (SARON)	Legacy Products (CHF LIBOR)
Mortgages	- Feb 2019: 7 options for using compounded SARON have been identified (page 35 of 79 LINK) - Nov 2019: Based on market trends and discussions with the WEKO, the focus has been centered around 3 options (page 31 of 86 LINK)	- Oct 2018: Homburger, a Swiss corporate law firm, presented a draft for a fallback template for retail loans under Swiss law. The template can serve as an example for a fallback language. Market participants have to decide whether and how they implement a fallback clause into retail loan contracts LINK -May 2020: more clarity on fallback design of CHF products has been presented (page 67 of 80 LINK) -Sep 2020: Homburger confirms that cessation and precessation is included in its fallback template. Further, compounded SARON plus ISDA's spread adjustment can be used as the fallback rate. In order to simplify the fallback and as long as it is in favor for the customer, compounded SARON can also be used without a spread.
Corporate loans (bilateral) SME loans (domestic)	 May 2020 guidance was given on how to use compounded SARON for new corporate lending - e.g. fixed advances and overdrafts (page 34 of 80 LINK) for fixed advances an internal rate based approach was deemed reasonable if there is a need to use a benchmark a compounded SARON in arrears seems reasonable in case of daily changes of the notional also a daily reference rate should be used - e.g. internal rates or SARON 	- Sep 2020: Homburger confirms that the same fallback template can also be used for corporate (bilateral) and SME loans (domestic)

Product	New Products (SARON)	Legacy Products (CHF LIBOR)
Syndicated loans	- May 2020: for syndicated loans in Swiss market, a lookback (including an observation shift) was proposed by using an offset of up to 5 business days (page 33 of 80 LINK)	 Oct 2019: The LMA exposure draft reference rate selection agreement is for use in relation to legacy transactions. Note that this involves the use of a two stage process which parties need to carefully consider as a one-step amendment process may be more appropriate depending on the circumstances. LINK Aug 2020: The LMA published a supplement to its revised replacement of screen rate clause to provide an agreed process for renegotiation for refinanced legacy transactions. LINK Sep 2020: The LMA published an exposure draft multicurrency rate switch agreement. This allows parties to build in a switch mechanism from CHF LIBOR to compounded SARON. LINK

Product	New Products (SARON)	Legacy Products (CHF LIBOR)
FRN	June 2019: The option «Lookback» with an offset of 3 to 5 business days was recommended.	Sep 2020: without robust fallback language, a consent consultation may be required
Futures	June 2018: A term sheet for 3M SARON Futures was published. It is based on the option «Payment Delay» using 2 business days.	Terms of the relevant exchanges apply
Caps and Floors	Nov 2019: A term sheet for SARON based Caps and Floors was presented. It is based on the option «Payment Delay» using 2 business days.	In general covered by ISDA / SMA, otherwise needs to bilaterally negotiated
Swaps	Jan 2017: A term sheet for SARON OIS was presented. It is based on the option «Payment Delay» using 2 business days.	In general covered by ISDA / SMA, otherwise needs to bilaterally negotiated
CCBS	May 2020: A term sheet for SARON SOFR CCBS was presented. It is based on the option «Payment Delay» using 2 business days. This term sheet can also serve as a template for other SARON RFR CCBS.	In general covered by ISDA / SMA, otherwise needs to bilaterally negotiated

FAQ

- -See attached Word File.
- -The Word File will be provided shortly before the meeting.

FAQ on other webpages (the list is not exhaustive)

- https://www.cler.ch/de/info/saron-hypothek-faq
- https://www.credit-suisse.com/ch/de/privatkunden/hypothek/saron-hypothek.html
- https://www.credit-suisse.com/microsites/ibor/de.html
- https://www.nab.ch/privatpersonen/hypotheken/weitere-hypotheken-informationen/von-libor-zu-saron.html#fragen-auskundensicht
- https://www.raiffeisen.ch/liestal-oberbaselbiet/de/privatkunden/hypotheken/modelle/alles-zum-saron.html
- https://six-group.com/saron
- https://www.ubs.com/global/en/libor.html
- https://www.ubs.com/ch/de/private/mortgages/products/saron-mortgage.html
- https://home.barclavs/libor-transition/
- https://www.citivelocitv.com/cv-content-web/storage/akpublic/eppublic/file/MSS_IBOR_Transition_FAQ.pdf
- https://www.db.com/company/en/media/How-Deutsche-Bank-is-preparing-for-IBOR-transition-and-Benchmark-Reform.pdf
- http://www.freddiemac.com/about/libor-transition.html
- https://www.ingwb.com/insights/articles/ibor-transition-frequently-asked-guestions
- https://am.ipmorgan.com/ch/en/asset-management/lig/insights/liquidity-insights/updates/markets-transition-awayfrom-libor/
- https://www.bis.org/bcbs/publ/d503.htm
- https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/WG_euro_risk-free_rates/html/index.en.html
- https://www.newyorkfed.org/arrc/fag
- https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/ARRC-fag.pdf
- https://www.isda.org/2019/09/10/euribor-reform-fags/
- https://www.isda.org/a/YZQTE/Understanding-Benchmarks-Factsheet.pdf

6. Recommendations and next steps

Robust fallback language

Recommendations by NWG and representatives of FINMA and SNB

- ISDA's Fallback Documents (Protocol) are expected to be published in the near future. ISDA offers the option to sign-up to the Protocol 'in escrow' ahead of the publication. This 'in escrow' process works by adhering in advance of the launch on a binding and complete basis. The list of signatories will be published along with the final documents and the list is intended to signal that the new fallbacks will be widely embedded in legacy contracts.
- In order to sign-up to the Protocol 'in escrow', please contact Breda Walsh (bwalsh@isda.org)
 or Rick Sandilands (rsandilands@isda.org)
 For further information, please view ISDA's
 webpage on the IBOR transition and its factsheet.

NWG, FINMA, and SNB representatives recommend that all market participants

- should sign up to ISDA's IBOR Fallbacks Protocol as soon as possible, or at the latest by its effective date,
- should sign similar protocols for other agreements (such as the SMA) as soon as possible,
- and to ensure in general that robust fallback languages are used in all other contracts.

NWG Recommendations

- The NWG repeats the recommendation to use the "shift" methodology, as long as domestic market is in the focus. In case international consistency is important, the "lag" methodology is a viable alternative. Furthermore, the NWG also repeats the recommendation to floor the compounded SARON, as long as the domestic market is in the focus. In case international consistency is important, flooring individual SARON values is a viable alternative.
- The NWG clarifies the fallback language for mortgages and recommends this fallback language also for bilateral loans with corporates or SME.
- The expectation of the NWG is that CHF LIBOR is discontinued at the end of 2021. Given that discontinuation is a decision for LIBOR's administrator and regulator, clarity on a discontinuation would come from respective statements by FCA, in line with its regulatory powers, or by IBA, in line with its published cessation procedure. A synthetic CHF LIBOR is not expected.
- Hence, "Transition now" is still an important recommendation. This includes further lenders
 launching SARON-based cash products as soon as possible and the increased usage of SARONbased derivatives. This also includes to ensure robust fallback language, as also recommended by
 FINMA and SNB representatives.

Next steps

- The finalized version of the FAQ will be made available on the NWG website following its review, please submit any comments until 6 October 2020.
- Monitor and foster national and international developments regarding implementation and / or usage of compounded term rates in cash products and the adoption of SARON in derivatives markets.
- NWG sub-working groups continue to liaise with other international working groups to align and coordinate efforts, in particular in areas where alignment is beneficial.

Next NWG meeting and publication of results

- -The next NWG meeting is scheduled for 1 February 2021, 15:00-17:00 (CET).
- Publication of NWG's recommendations
 - -Short summary of the meeting by 30 September 2020
 - Meeting minutes will be published on NWG website

Appendix

How to calculate the compounded rate in p.a.

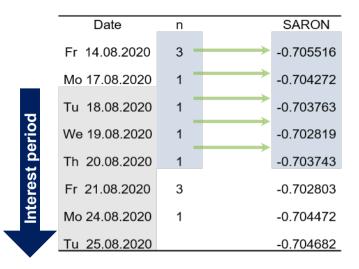
lag

Date	n		SARON
Fr 14.08.2020	3	A	-0.705516
Mo 17.08.2020	1	A	-0.704272
Tu 18.08.2020	1	//	-0.703763
We 19.08.2020	1	7	-0.702819
Th 20.08.2020	1	7	-0.703743
Fr 21.08.2020	3		-0.702803
Mo 24.08.2020	1		-0.704472
Tu 25.08.2020			-0.704682

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-2} \times n_i}{360}\right) - 1\right] \times \frac{360}{d_c^{IP}}$$

$$d_c^{IP} = \sum_{i=1}^{d_b} n_i$$

shift



$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-2} \times n_{i-2}}{360}\right) - 1\right] \times \frac{360}{d_c^{OP}}$$

$$d_c^{OP} = \sum_{i=1}^{d_b} n_{i-2}$$

- n_i: number of calendar days SARON_i applies
- d_b: number of business days in the interest period
- i: series of whole numbersfrom one to d_b
- d_c: number of calendar days in the observation (OP) or interest (IP) period

Empirical evaluation: basis between "shift" and "lag"

Methodology used

- Given SARON data from SIX, Compounded SARON values (rounded to 4 digits) were calculated using plain as well as lookback with observational-shift and lag methodology
- Differences observational shift to plain, lag to plain and observational shift to lag were calculated for 1M and 3M periods for each business day starting since the beginning of the SARON record (06-30-1999)
- Finally, statistical figures for the differences were computed. Since these strongly depend on the volatility of the SARON in the relevant period, different market regimes have been selected ("wild years" from 2000 to 2008, "near zero" 2009 to 2014 and "negative" from 2015)

1M Period, 3 days shift/lag

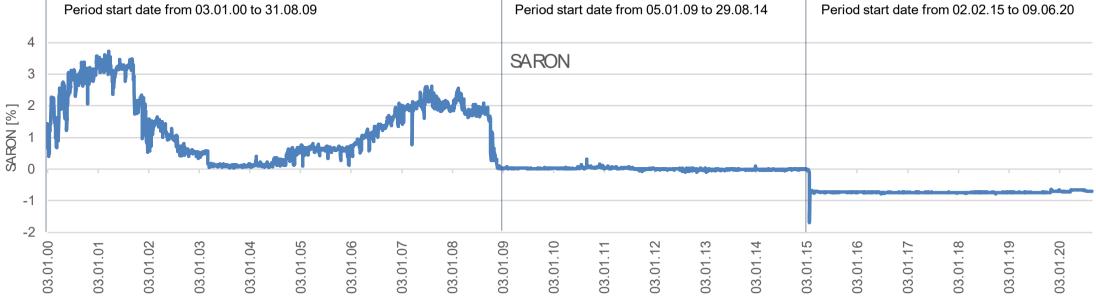
	[bp] Shift–Plain Lag–Plain Shift–Lag								[bp] Shift–Plain Lag–Plain Shift–Lag							[bp] Shift–Plain Lag–Plain Shift–Lag					
	Mean	0.14	0.46	-0.33	}			Ме	an	0.0)1	0.00	0.01	M	ean	0.	00	0.02	-0.02		
	StdDev	4.47	4.81	2.28	}			Sto	lDev	0.3	80	0.38	0.34	S	tdDev	0.	20	0.23	0.12		
	Min	-29.51	-22.14	-12.75	5			Min	1	-1.2	21	-1.49	-1.95	М	in	-1.	.11	-1.50	-0.68		
	Max	26.95	26.62	10.13	<u> </u>			Ma	X	1.3	35	2.89	1.16	<u>M</u>	ax	1.	.10	1.22	0.60		
	Period star	Period start date from 03.01.00 to 30.10.09						Per	Period start date from 05.01.09 to 31.10.14						Period start date from 02.02.15 to 07.08.20						
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	.00	.02	50.	.05	90.	.07	.08	60.	.10	<u></u>	.12	<u>5.</u>	<u> </u>	.15	.16	.17	2.	19	.20		
	03.01.00	03.01.02	03.01.04	03.01.05	03.01.06	03.01.07	03.01.08	03.01.09	03.01.10	03.01.11	03.01.12	03.01.13	03.01.14	03.01.15	03.01.16	03.01.17	03.01.18	03.01.19	03.01.20		

1M Period, 5 days shift/lag

	[bp] Shift–Plain Lag–Plain Shift–Lag									[bp] Shift–Plain Lag–Plain Shift–Lag							[bp] Shift–Plain Lag–Plain Shift–Lag					
	Mean	0.22	0.18	0.04	ļ.			Mea	n	0.0	1	0.00	0.01	Me	ean	0.0	00	0.00	0.00			
	StdDev	7.13	7.12	1.30)			StdD)ev	0.4	2	0.42	0.12	Sto	dDev	0.3	32	0.30	0.07			
	Min	-41.90	-39.64	-6.60)			Min		-1.5	7	-1.57	-0.56	Mir	า	- 2.	02	-2.02	-0.47			
	Max	36.53	36.53	12.23	<u> </u>			Max		1.3	8	1.64	0.59	<u>M</u> a	ıx	1.	31	1.31	0.45			
4	Period start date from 03.01.00 to 30.10.09						Perio	Period start date from 05.01.09 to 31.10.14 Period start date from 02.02.15 to 07.08							7.08.20							
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	3.01.00	3.01.02	3.01.03	3.01.05	3.01.06	1.07	3.01.08	3.01.09	1.10	<u>7.</u>	3.01.12	1.13	4.1	1.15	3.01.16	1.17	1.18	1.19	3.01.20			
	3.0	3.0	3.01	3.0	3.0	3.01	3.0	3.0	3.01	3.01	3.0	3.01.	3.01	3.01.	3.0	3.01.	3.01	3.01	3.0			

3M Period, 3 days shift/lag

[bp] Shift–Plain Lag–Plain Shift–Lag		hift–Lag	[bp] Sh	[bp] Shift–Plain Lag–Plain Shift–Lag		[bp] Shift–Plain Lag–Plain Shift–Lag					
Mean	0.17	0.49	-0.31	Mean	0.01	-0.01	0.01	Mean	-0.01	0.01	-0.02
StdDev	2.34	2.64	1.27	StdDev	0.11	0.20	0.20	StdDev	0.09	0.12	0.07
Min	-10.61	-8.53	-5.52	Min	-0.65	-0.88	-0.73	Min	-0.58	-0.50	-0.29
Max	11.71	12.10	4.06	Max	0.39	0.82	0.60	Max	0.35	0.43	0.28
5 : 1 : .	t data from 03		4.00.00	Poriod start		- 04 00 4 00	00.44		data from 02	. 00 45 1 00	2 2 2 2 2

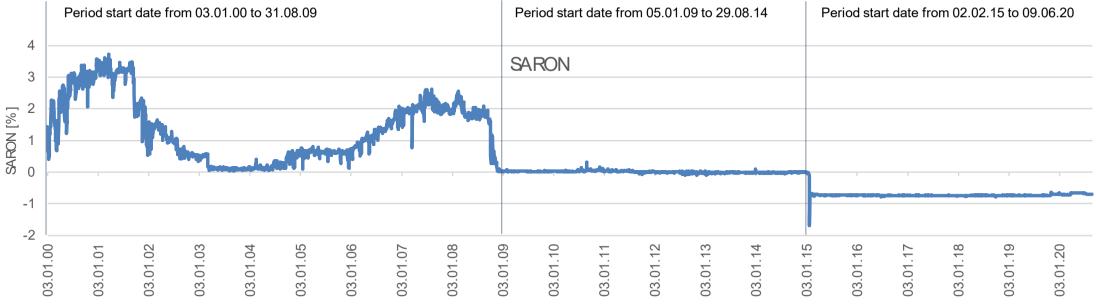


3M Period, 5 days shift/lag

Mean	0.28	ag–Plain Sł 0.23	0.04
StdDev	3.78	3.80	0.83
Min	-16.18	-16.03	-4.97
Max	14.71	14.23	5.62

[bp] Shi	[bp] Shift-			
Mean	0.01	0.00	0.01	Mean
StdDev	0.16	0.17	0.07	StdDev
Min	-0.80	-0.80	-0.19	Min
Max	0.54	0.63	0.22	Max

[bp] Sł	nift–Plain La	ıg–Plain Sh	nift–Lag
Mean	-0.01	-0.01	0.00
StdDev	0.15	0.15	0.05
Min	-0.76	-0.76	-0.21
Max	0.48	0.36	0.16

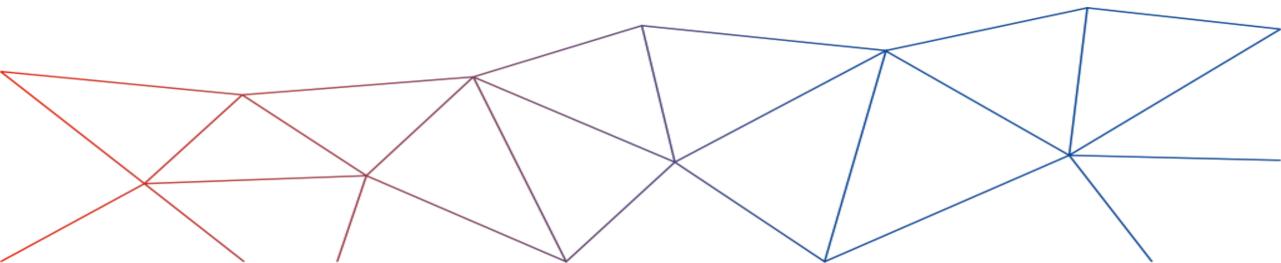




Appendix: Self-assessment results

Q1 2020

26 banks, data cut-off date 31.03.2020





Executive Summary

- All sample banks choose either to actively wind down their LIBOR-based legacy positions (by soliciting clients to consent to contract
 amendments or to switch to new RFR¹)-based products) or to adopt standard fallback languages (e.g. ISDA, SMA), or both.
- 40% of banks and securities firms did not identify impediments to the proactive unwinding of legacy LIBOR positions. Impediments cited most often by the remaining respondents were the lack of international standards and different levels of progress by national working groups, system readiness, counterparty reluctance and lack of market liquidity of RFR-based products.
- 18% of the banks continue to trade/offer LIBOR-based products until Q4 2021 due to their market making role (especially for OTC derivatives) or their large product catalogue that requires a prolonged staged product development and launch schedule.
- The majority of banks with fewer and less complex models will have finalized model review/update in H1 2021.
- All banks have a (IT) system upgrading program in place or a tactical solution if the upgrade is not feasible.
- Around 70% of banks have an inventory of reports that need to be amended due to the LIBOR transition. The others do have an approach to review their large size of reports. Some banks specifically mention their awareness to amend client product brochures.
- 42.9% of total LIBOR exposure mature after 2021, of which 81.4% are OTC derivatives, where standardized fallback language is applicable for 99.85%.
- For (CHF-LIBOR) retail and corporate loans, only some parts can be unilaterally amended by banks. Banks need to reach out to clients individually to transition them to ARR-based products (if already launched by the bank) or include fallback language. Commentary indicates that client outreach has started but may take until end of Q4 2021.
- For (CHF-LIBOR) syndicated loans and floating rate notes, most banks wait for consortium leaders and note issuers to take the initiative to adapt contracts.
- Only 15% of banks reported "tough legacy" contracts. Commentary indicates this was mostly done for conservativeness and since multi-party consent is required. The portion of contracts for which renegotiation is challenging (e.g. due to high complexity and highly exotic nature of the underlying product, or due to counterparty being non-going concern) is presumably small.

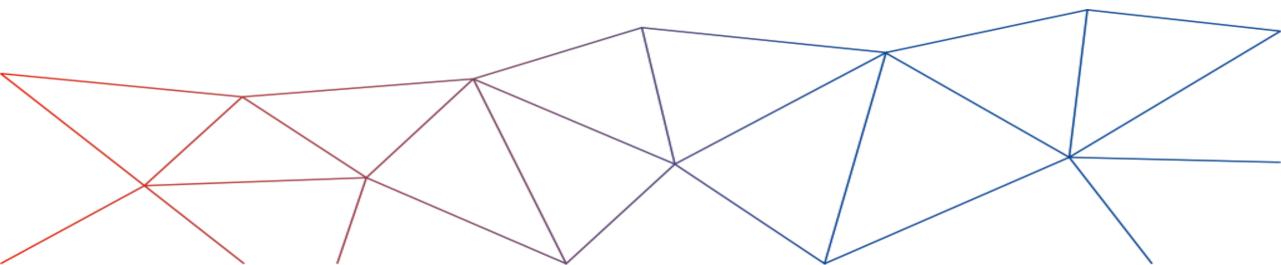


1Q20 Self-Assessment - Qualitative

The qualitative part of the self-assessment contained **individual follow-up questions** to the 2019 self-assessment regarding legal risk, valuation risk, operational readiness as well as derivative contracts. NWG co-chairs and work-stream leads provided inputs to the design of the questionnaire.

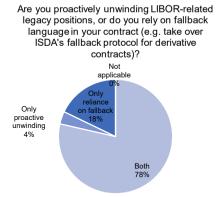
It is a one-off self-assessment that is not planned to be repeated in Q2-Q4 2020.

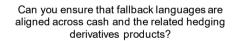
The sample contains 28 banks and securities firms (Swiss legal entities of GSIBs were counted separately).

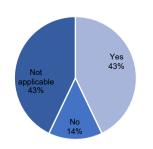




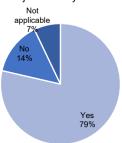
General questions







Are you able to evaluate the impact (in terms of pricing) on outstanding derivative contracts based on the proposed spread adjustment by ISDA?



Among the main impediments for proactive unwinding of legacy positions, banks cited the following:	# banks
Lack of international standards, e.g. for all RFRs (different degree of progress of different National Working Groups); ISDA fallback language not yet available; spread adjustment consultation by ARRC ongoing; missing international market standard for syndicated loans	13
None	11
System readiness incl. vendors, e.g. for lending	9
Counterparty readiness and reluctance, lack of interest or prioritization (specifically mentioned by 1 bank each were other banks or the bank's external asset managers)	8
Insufficient liquidity on new RFRs; some are still in early stages. Lack of liquidity in cross-currency basis swaps was specifically mentioned by 1 bank	7
Effort and resources involved in amending contracts (large number of contracts, lengthy negotiation or multi-party consent required e.g. for securitizations)	4
Lack of forward-looking term rates	4
Reduced benefit of transitioning IRS at the current stage (wait for ISDA)	2
Covid-19 impacts, e.g. loan extensions in days still based on LIBOR; or market volatility with divergence of IBOR/ARR spreads	2
Client tax and accounting considerations at a domestic level (only international transition has been regulated)	1
Status of analyses for a neutral transition regarding replacement values	1
Impractical to unwind or compress bilateral position of single-currency IRS by cleared single-currency IRS	1
Tough legacy (e.g. variance by product type, certain client types)	1

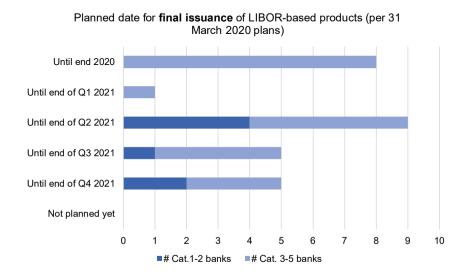


Legal risk

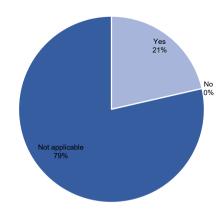
% LIBOR contracts mature after 2021 whose amendments still
require counterparty consent

10
9
8
7
6
7
4
4
4
3
2
1
2
2
2
2
1
Less than 5% Less than 25% Less than 50% Up to 75% More than 75%

■# Cat. 1-2 banks ■# Cat. 3-5 banks



Have you put a plan in place to replace LIBOR-based capital instruments before year-end 2021?

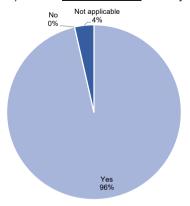


- Counterparty consent was interpreted in different ways. Where a large number of contracts require counterparty consent, the respondent typically included derivatives under the ISDA master agreement.
- Most banks do not have LIBOR-based capital instruments. Those who have, with a
 total of CHF 38.6bn LIBOR-based capital instruments, of which 20.8bn are
 denominated in USD and 17.7bn in CHF, plan to solicit investor consent to
 amend the reset rate, and/or call the instrument on the first upcoming call date to
 avoid refixing at a fixed rate.
- Reasons for banks to continue to trade/offer LIBOR-based products until the second half of 2021 are i) product terms include fallback ii) illiquid ARR-based OTC market iii) market maker role, and iv) staged globally coordinated product launch.

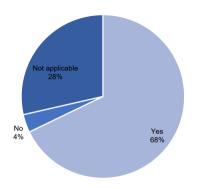


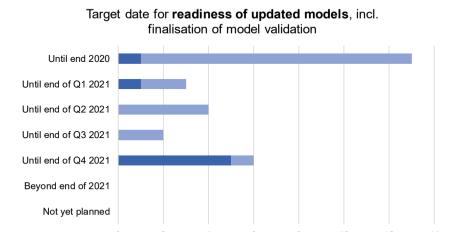
Valuation risk

Have you put a plan in place for updating and validating models and tools (e.g. risk metrics, valuation, pricing, accounting and tax models and tools) that are linked to LIBOR before year-end 2021?



Have you put a **plan in place for revaluing the LIBOR contracts** (maturing after 2021 and still requiring amendment) in case the <u>counterparty does not (fully) consent</u> to the proposed amendment which would lead to a need for settlement or inherent legal risk





Cat.1-2 banks

• All banks have a plan for updating and validating models. One bank states that it has not yet agreed on the methodologies to adjust and validate the models.

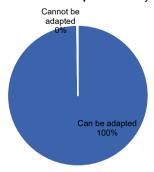
Cat. 3-5 banks

- Large banks have a larger model inventory, and hence, will have finalized model
 updates in Q4 2021. This also applies to Swiss subsidiaries of large foreign banks as they
 use their parent's models.
- Most banks expect that existing LIBOR-based products can be replaced by new RFR-based products or consensual solutions with counterparties can be found before 2021.
- Most banks that do not have (or do not see a need for) a specific revaluation plan either rely on a market convention update (e.g. ISDA fallback) or will solicit counterparty consent on a case-by-case basis due to an immaterial number of outstanding contracts.

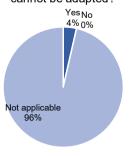


Operational readiness

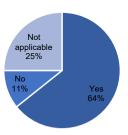
% systems (of all banks) affected by the LIBOR replacement that **can be adapted** before year-end 2021



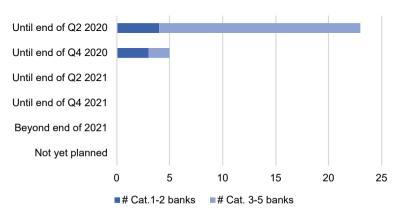
Have you put a plan (i.e. tactical solutions, workarounds) in place for the systems which cannot be adapted?



Have you put a plan in place to ensure that your systems can handle the switch from LIBOR to RFRs via fallback?



When will you/did you **complete an analysis of which IT systems** are affected by LIBOR
transition?

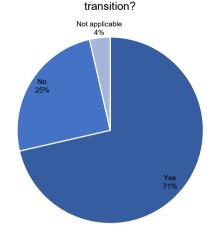


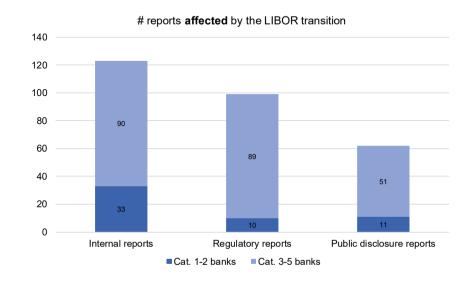
- Total number of systems affected: 672 internal and 212 third party.
- One bank reported that it is in possession of a third party system that cannot be adapted in time by year-end 2021 due to an uncertain system upgrade date, thus a tactical solution will be developed during H2 2020.
- Most respondents have already analyzed which IT systems are affected by the LIBOR transition while the remaining plan to do so at the latest by year-end 2020.



Reporting

Do you have an **inventory of reports** affected by the LIBOR





- Some SIBs indicated that they either have already adapted all relevant reports pre go-live of their new products or have not created such an inventory. Due to the large number of reports creating an exhaustive list is sheer impossible. Hence, they choose to identify and review reports front-to-back when new RFR products are launched, LIBOR models updated, IT system updated, and fallbacks implemented.
- Internal reports cited as "affected" include MIS/ALM/ALCO/risk reports to various governance committees (e.g. VaR, capital calculations, BCBS 239 risk measures), product-level reports, client statements (e.g. tax report, investment reports) etc.
- **Regulatory reports** cited as "affected" include EMIR, FinfraG (104, 39), SNB reporting (e.g. MONA, KRED, HYPO_B, ZISA_B, JAHR, BUWO, ZIRK, ZIRU), Basel reporting (Pillar 1, IRRBB, LCR, NSFR), tax filings (e.g. US IRS Form 1120-F), supervisory reporting etc.
- **Public disclosure reports** cited as "affected" include quarterly/annual financial statements, BCBS 239 reports, SEC filing, regulatory disclosures (e.g. IRRBB) etc.
- Other content affected includes product brochures and client newsletters.

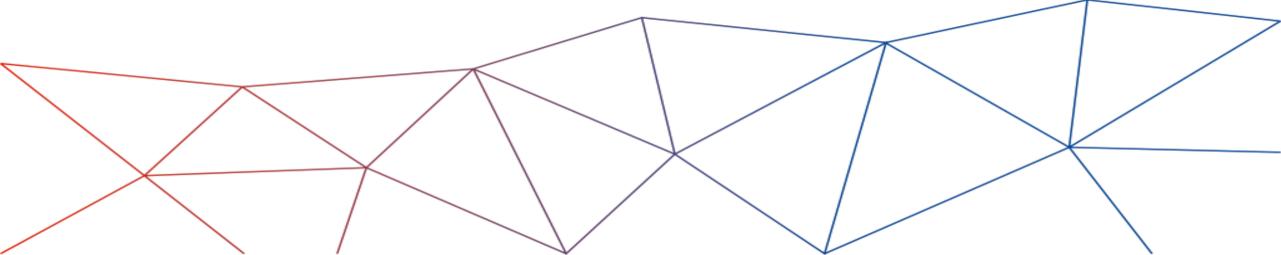


1Q20 Self-Assessment - Quantitative

The quantitative part of the self-assessment tracks LIBOR-based contract volumes per product type.

It will be repeated in Q2-Q4 2020, to enable monitoring of LIBOR exposure levels in Switzerland.

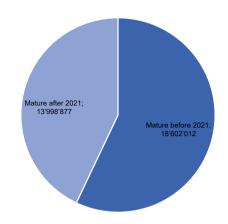
The sample contains 26 banks and securities firms (Swiss legal entities of GSIBs are not counted separately since gross exposures are already captured under Group volumes). The 26 firms selected cover more than 99.8% of total LIBOR contract volumes mature after 2021 (based on 2019 self-assessment data for 43 banks and securities firms selected in a risk-based manner). Thus, while the data does not cover LIBOR exposures of all Swiss banks and securities firms, any remaining LIBOR exposure should be immaterial.



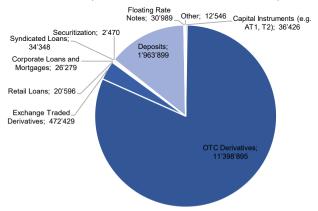


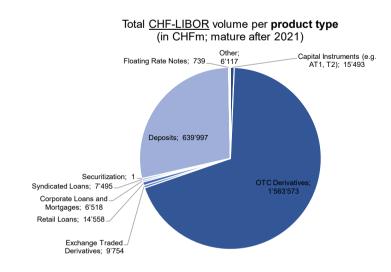
Total LIBOR exposure mature after 2021

Total LIBOR volume maturity (in CHFm; all CCY)



Total LIBOR volume per **product type** (in CHFm; all CCY; mature after 2021)



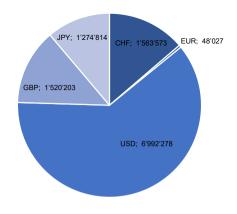


- OTC derivatives make up the largest portion of LIBOR products maturing after 2021:
 - 42.9% of total LIBOR volume matures after 2021, of which 81.4% are from OTC derivatives:
 - The CHF-LIBOR volume with maturity after 2021 consists of 69.1% OTC derivatives.
- Key drivers for the large OTC derivative volume are i) market making ii)
 internal/external deals for ALM purposes iii) de-/hedging of both sides of balance
 sheet, and iv) reported gross numbers (not netted).

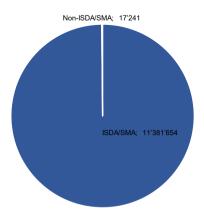


LIBOR OTC derivatives mature after 2021

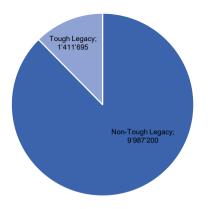
Currency composition of OTC Derivative contracts mature after 2021 (in CHFm)



Total volume OTC Derivatives ISDA/SMA vs Non-ISDA/SMA mature after 2021 (in CHFm: all CCY)



Total volume OTC Derivatives **Tough Legacy vs non-Tough Legacy** mature after 2021 (in CHFm; all CCY)

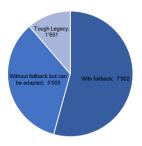


- The sample banks reported total LIBOR **OTC** derivative volume of **CHF 25,930bn**, of which 44% mature after 2021.
- 50% of all OTC derivatives are Interest Rate Swaps, 30% are Interest Rate Forwards.
- 61.3% of all OTC derivatives with maturity after 2021 are in USD and 13.7% in CHF.
- The majority of these contracts relies on standardized clauses for which **no obstacles in updating the fallback language are expected**.
- The top 5 banks with most OTC derivatives will actively manage potential "tough legacy" contracts by switching and limiting trades, and bilateral negotiations.

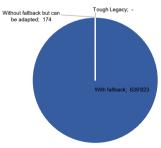


CHF-LIBOR cash products mature after 2021

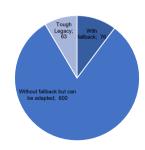
Total volume CHF-LIBOR **Retail Loans** (in CHFm; mature after 2021)

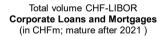


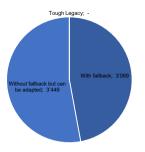
Total volume CHF-LIBOR **Deposits**(in CHFm; mature after 2021)

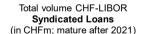


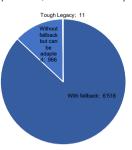
Total volume CHF-LIBOR
Floating Rate Notes
(in CHFm; mature after 2021)











- Retail loans: CHF-LIBOR-linked retail loans are relevant for almost two thirds of the respondents. For some banks, most loans can be unilaterally amended, for others, clients will be individually approached to negotiate fallbacks or transition to alternative products. Banks' internal deadlines for this vary between end of Q1 2021 end of Q4 2021. Some banks can unilaterally terminate the loans for variation of contract after a notice period; they intend to use this to mass-transition CHF-LIBOR loans to Compound SARON loans, keeping all other contract provisions unchanged.
- **Corporate Loans:** Several respondents note that clients with contracts without fallback will be approached as soon as SARON-based products are available.
- **Syndicated Loans:** Several respondents wait for consortium leaders to take the initiative. Some were waiting for the recommendation by the Swiss NWG in May 2020 and will update contract terms accordingly.
- **Deposits:** Less than 10% of respondents have LIBOR-linked deposits. These contracts can be amended unilaterally.
- Floating Rate Notes: (CHF) LIBOR-FRNs are relevant to about one third of respondents. The few FRN-issuing firms partially already have contractual rights to establish alternative rates, and else will pursue consent solicitations, unwind positions or call notes where possible before 2022. Banks holding notes issued by third parties expect that issuers take the initiative.



Tough legacy ("TL")

- FINMA defined TL as LIBOR-based contracts mature after 2021 "that may prove unable to be converted or amended to include robust fallbacks".
- 22 of 26 respondents reported **no** TL whatsoever.
- No TL was reported for exchange-traded derivatives, corporate loans and mortgages, deposits or other products.
- Total tough legacy reported makes up 10.2% of the total LIBOR contract volume mature after 2021 reported as of 31 March 2020.
- The **4 banks** that reported TL did so in order **to be conservative**. The reason most commonly cited is that **multi- party consent** is required for amendments.

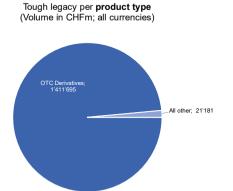
Number of respondents reporting tough legacy:	
Product type	#
Capital Instruments (e.g. AT1, T2)	2
OTC Derivatives	2
Exchange Traded Derivatives	-
Retail Loans	1
Corporate Loans and Mortgages	-
Syndicated Loans	2
Securitization	1
Deposits	-
Floating Rate Notes	2
Other	-

- Other reasons / commentary provided are:
 - o For **capital instruments**, the 2 banks plan to launch solicitation with multiple counterparties to amend terms.
 - One of two banks classified all OTC derivatives mature after 2021 without fallbacks as TL, including also all positions under ISDA or other master agreements. These master agreement positions make up 98.1% of the total OTC TL volume across all banks.
 - The other bank cited that reasons for the TL classification of OTC derivatives are i) multi-party consents being required (e.g. SPVs) to amend product terms, ii) the underlying product being highly complex, exotic in nature, or iii) the counterparty being non-going concern (e.g. wind-down entity).
 - o 1 bank reported TL **syndicated loans** since its counterparties had proven to be tough negotiation partners in the past.
 - o 1 bank classified **securitizations** as TL as they expect fallback provisions to be less homogeneous.
 - 1 bank reporting TL floating rate notes expects its TL levels to actually be lower given the ARRC's clear guidance for the transition of USD FRN.



Tough legacy reported per currency and product type





Tough legacy by LIBOR currency (in % of total LIBOR mature after 2021)

Product type	Total TL in % (all LIBOR currencies)	CHF	EUR	USD	GBP	JPY
Capital Instruments (e.g. AT1, T2)	28.28%	1.25%	-	48.53%	-	-
OTC Derivatives	12.38%	4.47%	3.37%	15.68%	9.11%	8.27%
Exchange Traded Derivatives	-	-	-	-	-	-
Retail Loans	16.33%	11.34%	-	69.38%	0.59%	50.00%
Corporate Loans and Mortgages	-	-	-	•	-	•
Syndicated Loans	0.03%	0.15%	-	1	-	1
Securitization	99.96%	-	-	100.00%	100.00%	ı
Deposits	-	-	-	-	-	-
Floating Rate Notes	16.25%	8.53%	28.84%	14.33%	0.73%	39.98%
Other	-	-	-	-	-	-

Tough legacy per **product type** <u>excl.</u> OTC derivatives (Volume in CHFm; all CCY)

