Press release

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

National Working Group on Swiss Franc Reference Rates

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Zurich, 8 May 2020

Executive summary of the 7 May 2020 meeting of the National Working Group on Swiss Franc Reference Rates

The National Working Group on Swiss Franc Reference Rates (NWG) met on 7 May 2020 to discuss the progress of the LIBOR transition in Switzerland and relevant international developments.

The key items of yesterday's meeting were:

- (i) FINMA expects that market participants undertake all necessary steps to ensure LIBOR is replaced, latest until year-end 2021. Moreover, FINMA sent a second "Dear CEO letter" to those banks and securities firms, which have the most material post-2021 LIBOR exposures on their books. Given the risk associated with the transition at the level of individual firms, FINMA recommends that each bank and securities firm impacted by the LIBOR transition works to comply with FINMA's expectations, even if not in the selection of firms that received a "Dear CEO letter". These expectations include i.a. substantial progress in replacing CHF LIBOR-based by SARON-based cash products by the end of 2020, proactive action towards issuing new products based on alternative reference rates, or testing of IT systems, models and tools.
- (ii) NWG members were briefed about relevant market developments. These include SARON cash products that were launched since the last meeting and international developments regarding the increased visibility of compounded rates.

 Furthermore, SIX gave an update on SARON Compound Indices, announced to provide a web-based calculator by August 2020 and informed about licensing.
- (iii) The NWG recommended to use the lookback option for CHF syndicated loans with an offset of five business days. It was noted that parties might consider different offset periods based on needs or consistency with other currencies.

- Furthermore, an update was given on the legitimacy of using compounded SARON related to the provisions of Art. 314 Swiss Code of Obligation and on customer information regarding interest rate calculation.
- (iv) NWG members were informed about the development of SARON and LIBOR interest rate swap trading volumes based on trade repository data. Moreover, a new cross currency basis swap (CCBS) and an updated SARON cap (floor) term sheet were presented.
- (v) Another key agenda item was the discussion on LIBOR end-scenarios and fallback language. An analysis of possible LIBOR end-scenarios was presented. In addition, the International Securities and Derivatives Association (ISDA) gave an update on the fallback language specifically on pre-cessation trigger. ISDA is working on a single fallback language, including pre-cessation and permanent cessation triggers. The publication of the fallback language is targeted for July 2020. The meeting attendees also discussed possible spread adjustments for the 3-and 6-month CHF LIBOR. The NWG concluded its consideration of this agenda item with a discussion on fallback design for CHF cash products.
- (vi) Lastly, the results of the infrastructure webinar that was held in February 2020 were presented.

The NWG members agreed on the following main recommendations and next steps:

- The NWG recommends to use the lookback method for CHF syndicated loans with an offset of 5 business days.
- Market participants should transition LIBOR exposures prior to end-2021 wherever possible.
- Publication of the following documents:
 - CCBS term sheet

o Updated cap (floor) term sheet

The minutes of the meeting will be published in due course on the NWG website.¹

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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 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.

Minutes of the 7 May 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-fourth meeting and reminded them of their responsibilities related to competition law and confidentiality. Due to the requirements of the Federal Office of Public Health, the meeting was held virtually.
- The Swiss Financial Market Supervisory Authority (FINMA) expects that market participants undertake all necessary steps to ensure LIBOR is replaced, latest until year-end 2021. Moreover, FINMA sent a second "Dear CEO letter" to those banks and securities firms, which have the most material post-2021 LIBOR exposures on their books. Given the risk associated with the transition at the level of individual firms, FINMA recommends that each bank and securities firm impacted by the LIBOR transition works to comply with FINMA's expectations, even if not in the selection of firms that received a "Dear CEO letter". These expectations include i.a. substantial progress in replacing CHF LIBOR-based by SARON-based cash products by the end of 2020, proactive action towards issuing new products based on alternative reference rates, or testing of IT systems, models and tools. FINMA also supports the Basel Committee on Banking Supervision's (BCBS) statements on benchmark rate reforms detailed on slide 9 of the presentation.
- A representative from the Working Group on Sterling Risk-Free Reference Rates (RFRWG) gave an update on the impact of the coronavirus on the timeline for firms' LIBOR transition plans in the United Kingdom. Further to the joint statements by the RFRWG, the Financial Conduct Authority (FCA) and the Bank of England (BoE) made on 25 March and on 29 April, it remains the assumption that firms cannot rely on LIBOR being published after the end of 2021. Nevertheless, the RFRWG, the FCA and the BoE recognize that it will not be feasible to complete transition away from LIBOR across all new sterling LIBOR linked loans by the original end-Q3 2020 target. There will likely be continued use of LIBOR-referencing loan products into Q4 2020 in particular, to maintain the smooth flow of credit to the real economy. It was also informed about some developments regarding the EU benchmark regulation (BMR). The EU BMR is currently undergoing a review to consider of there are any mechanisms that could potentially help to address some of the transition challenges for certain legacy contracts that do not contemplate the permanent cessation of LIBOR. Publication of any development is expected over the summer.

2. Using compounded SARON

2.1. Market developments

- NWG members were briefed about relevant market developments. Since the last meeting, several banks launched first SARON-based cash products. Most notably some banks started offering SARON retail mortgages. The interest payments of these mortgages are based on a compounded in-arrears SARON and an interest rate floor of compounded SARON is implemented at the 0% level.¹
- NWG members were also given an update about the visibility and accessibility of compounded SARON.² These include:
 - Formula for compounding: compounded SARON can be calculated by using the standard formula for compounding and the daily SARON rates for the desired period.
 The formula is available on the <u>SIX website</u>. The formula provided also allows to start or end the observation period on non-business days.
 - O Calculator: the calculator is a user interface that only requires a start- and end-date in order to reproduce the compounded rate for this specified interest period. SIX is currently working to provide a free to use calculator for release on the SIX website.
 - o Index, i.e. SAION: the Swiss Average Index Overnight can be used to easily calculate the compounded SARON for a desired period (if the start- and end-dates are business days). SAION is published daily alongside with SARON by SIX. The visibility of compounded rates also increased in other currency areas. In the United States, the Federal Reserve Bank of New York (NY Fed) offers a so-called SOFR Index which is the equivalent to the SAION but is based on the Secured Overnight Financing Rate (SOFR). The Alternative Reference Rate Committee recommends to use the SOFR Index for FRN. In the UK, the BoE intends to publish a SONIA Compounded Index that is based on the Sterling Over-Night Index Average (SONIA).
 - o SARON Compound indices: compounded indices are unique fixings per business day for specific tenors. SARON Compound Indices are now available for benchmarking and financial products on the SIX website. Other currency areas are also working on or already publishing such compound indices, called "Averages". Not all "Averages" use the same methodology. SOFR Averages, published by the NY Fed, use a fixed number of calendar days. SARON Compound Indices in contrast follow as closely as possible the money market calendar. The RFRWG is currently evaluating the publication of SONIA Period Averages. In the US, Fannie Mae and Freddie Mac announced details about their adjustable-rate mortgage products indexed to the SOFR Averages.

See slide 13. Additionally, St. Galler Kantonalbank and UBS launched SARON mortgages on 11 May 2020, followed by Luzerner Kantonalbank on 18 May 2020.

² See slides 14 ff.

- In addition, the meeting attendees were informed on the differences by either referencing the formula or the SARON Compound Indices in a contract. The difference is that the formula allows the inclusion of non-business days. Further, the formula can be applied to any period length, i.e. a broken period. Hence, the indices might look easier to understand at first glance. However, the formula is far more flexible and needs no further explanations and adaptions.
- A representative from SIX gave an update on the availability of <u>SARON Compound Indices</u> and announced that SIX intends to provide a web-based calculator until August 2020.³ The SARON Compound Indices exist for 1-, 3 and 6 month. The methodology is included in the existing <u>Swiss Reference Rate rule book</u>. SIX also informed about the endorsement of several SIX indices under the EU BMR and their subsequent listing in the European Securities and Markets Authority register. Lastly, SIX provided information about the licensing of Swiss Reference Rates. Additional information can be found in their <u>FAO</u>.

2.2. Corporate lending

- The Loan and Deposit (L&D) sub-working group set up a working group on syndicated loans in 2019, with the aim of evaluating whether a compounded RFR rate can be used in a syndicated loan deal. Initial feedback was that a compounded RFR rate cannot be used for syndicated loans and international guidance should be awaited. However, during the discussions, members realized that cash flow certainty is only needed for a short period. Hence, the working group members identified option 2 (lockout) and option 3 (lookback) to be suitable for syndicated loans. The NWG recommends using the lookback option for syndicated loans in the Swiss market with an offset of five business days. It is noted that parties might consider different offset periods based on borrower/lender needs or consistency with other currencies. It was further highlighted, that uniformity of used methods across the different currencies is of the utmost importance and that international developments will be monitored closely. For very short dated loans, e.g. a loan where the interest period is shorter than the offset, other methods might be preferred (e.g. last recent). The parties to a syndicated loan might also want to consider, how breakage costs are calculated for a RFR loan. A meeting participant mentioned that by choosing the lookback option, the number of calendar days do not necessarily match the number of business days and that this issue is still discussed in other currency areas.
- The meeting participants were also informed about the use of compounded SARON in corporate lending. Fixed advances, where the notional and the interest rate are fixed in advance, are very common in corporate lending. Client pricing is often defined as a predefined spread over LIBOR, e.g. in multi-period/rollover loans or as drawdown with predefined pricing under a credit line. Where there is a need to price of a benchmark, these cases can use compounded SARON in a 'plain', 'lookback' or 'settlement delay' option with the main difference, that the interest payment is only known near or at the end of the interest period.

³ See slides 17 ff.

Finally, the chair of the Derivatives and Capital Market sub-working group went through the differences between the recommendations for a SARON based FRN compared to the SOFR FRN.⁴

2.3. Mortgage lending

- The meeting participants were given an update on the legitimacy of using compounded SARON. At the NWG meeting in June 2019, Prof. Glanzmann provided an analysis on the use of compounded SARON under Article 314 of the Swiss Code of Obligations. It was stated that compounded SARON is no circumvention because of the clarity of interest, it is sufficient that interest payments are «determinable» by a formula. Prof. Brändli added that borrowers shall get sufficient information about the calculation method to have clarity on interest such that a conflict with Art. 314 is avoided. The co-chairs have asked Prof. Glanzmann to elaborate further on his argument; his expert opinion will be published on the NWG website together with the minutes.
- The co-chair informed the NWG members about possible customer information on interest rate calculation. It was pointed out that there is no doubt that customers shall get sufficient information to understand the product and to make an educated decision. Market information provided by the NWG and SIX include:
 - o Options for using compounded SARON in loans presented at the NWG.
 - Compounding formula documented in <u>Swiss Reference Rate rulebook</u> (see also <u>short overview</u>).
 - o SARON, SAION and SARON Compound Indices publicly available.
 - Web-based calculator provided by SIX.

Product information provided by the bank could include:

- A link to the <u>Swiss Reference Rate rulebook</u> or use of the formula therein in the contract.
- Marketing material to help the customer to make an educated decision.

3. SARON-based derivatives

The chair of the Derivatives and Capital Market sub-working group gave the meeting participants an overview about the developments in SARON swap trading activity. The traded notional referencing SARON is increasing but remains smaller than the LIBOR-based notional. LIBOR-based swaps are particularly traded in longer tenors.⁵ It was asked whether the data also includes a breakdown of outstanding notional as this would better reflect the current market conditions, as part of the LIBOR trading volumes could be due to the closing

⁴ See slide 24.

⁵ See slide 29.

- of positions. The SNB will evaluate if these numbers can be generated for the next meeting in September.
- The sub-working group also developed a term sheet for a SARON/SOFR cross currency basis swap for the interdealer market. The term sheet uses the option "payment delay" to determine the interest rate.
- In addition the <u>draft-template for a SARON cap (floor) confirmation</u> has been updated to be used under ISDA language. Both documents will be uploaded on the NWG website.

4. LIBOR end-scenarios and fallback language

4.1. LIBOR end-scenarios

- The private sector co-chair of the NWG ran through the mechanics of possible LIBOR endscenarios. An important differentiation must be made between the announcement and replacement date. The announcement date is the date on which a statement is made that LIBOR will be discontinued or will become non-representative. This date triggers the spread adjustment calculation. The replacement date is the date on which LIBOR is ceased or is no longer representative. The fallback rate is the rate with which LIBOR will be replaced.
- Two possible parties that can trigger the end of LIBOR are ICE Benchmark Administration (IBA) or the FCA. In case there is no successor administrator, IBA can announce a voluntary discontinuation for which they intend to give at least one year's prior notice. The FCA can also trigger the end of LIBOR through a loss of representativeness. FCA's assessment on representativeness is done with the exit of a panel bank or every two years.
- The two scenarios outlined are a voluntary cessation through IBA announced at least a year before the end of 2021 or a loss of representativeness announced by the FCA. There might also be a combination of both scenarios for different currencies and tenors.

4.2. **ISDA Update**

- ISDA is currently undertaking work to amend the 2006 ISDA Definitions to implement fallbacks for various LIBOR.6
- The fallbacks apply upon the permanent discontinuation of the relevant IBOR (based on predetermined, objective triggers) and will be to the relevant alternative risk-free rate (RFR), subject to term and spread adjustments. The permanent discontinuation trigger is defined as "Index Cessation Event" (i.e. announcement date) in the non-LIBOR Rate Options. The fallbacks will not apply until the actual discontinuation of the relevant IBOR (if that is after the announcement date). This date is defined as the "Index Cessation Effective Date" (i.e. replacement date).

⁶ See slides 40 ff.

- For LIBOR the fallbacks apply upon the earlier of (i) the permanent discontinuation or (ii) the non-representativeness (as determined by the UK FCA) (a so-called "pre-cessation" event) of LIBOR in the relevant currency (based on pre-determined, objective triggers) and will be to the relevant alternative RFR, subject to term and spread adjustments.
- <u>Bloomberg</u> will publish (i) the compounded setting in arrears rate, the spread adjustment and the 'all in' fallback rate on a daily basis.⁷
 - O Upon the occurrence of an 'Index Cessation Event' for the relevant IBOR, the spread adjustment will be set (but the indicative compounded setting in arrears rate and 'all in' fallback rate will continue to change on a daily basis). Contracts will continue to reference the relevant IBOR until the 'Index Cessation Effective Date' occurs.
 - O Upon the occurrence of an 'Index Cessation Effective Date' for the relevant IBOR, contracts that continue to reference the relevant IBOR will reference the 'all in' fallback rates (which will include the spread adjustment that was set on the date of the 'Index Cessation Event' but with changing compounded setting in arrears rates and 'all in' fallback rates).
- The publication of the final form of Supplement to the 2006 ISDA Definitions and of ISDA 2020 IBOR Fallbacks Protocol is targeted for July 2020 which then would take effect 4 months after.

4.3. Spread calculations

The meeting participants were informed about possible ISDA spread distributions under stressed market conditions. In CHF, the ISDA spread adjustment will likely not move materially anymore (based on the assumption that CHF LIBOR is announced to be discontinued on 31 December 2021). Nevertheless, the ISDA spread adjustment could be materially different from the spot LIBOR-OIS basis at the moment of calculation and cessation. Hence, market participants should transition LIBOR exposures prior to end-2021 wherever possible.

4.4. Implications 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. If CHF LIBOR is floored in the contract, then it seems suitable to floor ISDA's spread plus compounded SARON.

 $^{^{7}}$ One meeting participant asked whether SIX could also publish these spread calculations for CHF LIBOR.

5. Operational readiness

NWG members were informed about the webinar for infrastructure providers that was held by the NWG on 25 February 2020. The main take-aways have been that the LIBOR transition is on the radar of infrastructure providers and the majority indicated that they are already engaged with their customers on this topic. Further, a majority indicated that they already have implemented the recommended options for compounded SARON.

6. Recommendations

- Use the lookback method for CHF syndicated loans with an offset of 5 business days.
- Consider "payment delay" for a USD/CHF CCBS based on RFRs for the interdealer market.
- Market participants should transition LIBOR exposures prior to end-2021 wherever possible.
- At the last NWG meeting it was recommended to consider the usage of a pre-cessation trigger. This recommendation supports the alignment with ISDA's fallback language and therefore between cash and derivatives contracts.

7. Next steps

- The CCBS and the amended cap (floor) term sheets will be made available on the NWG website.
- 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 (all).
- 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 (all).
- NWG sub-working groups develop a FAQ for a better overview of topics and recommendations covered by the NWG (all).
- The next NWG meeting is scheduled for 29 September 2020, 15:00-17:00.

Farewell message

The official sector co-chair of the NWG expressed his appreciation to three outgoing members of the NWG secretariat and wished them well in their respective new functions. In particular, he thanked Matthias Jüttner for his leadership and his valuable contributions to the NWG's work – come August 2020, when he will assume a new role within the SNB, he will be sorely missed as an NWG team member.

Attendance at the 7 May 2020 meeting

Martin Bardenhewer – Zürcher Kantonalbank, co-chair

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

Philipp Ackermann – Raiffeisen Christian Bahr – SIX

Markus Bieri – SwissACT / LafargeHolcim

Marie-Anne Bourgoz Gorgé – BCGE

Zoran Celeketic – UniCredit Bank Austria

Christophe Cherdel – BCV

Alberto Covin – UniCredit SpA (Italy)

Thomas Damagnez – CA Indosuez
Guillermo De La Fuente – ACTSR / SITA

Michael De Vegvar – Leonteq
Robert Eigenheer – Eurofima
Michel Erni – BKB
Fernando Fasciati – Raiffeisen
Dominic Fehr – UBS

Kevin Ferrier – CA Indosuez

Juergen Frank – UniCredit Bank Austria

Fernando Gardoni **SGKB** Christian Gerber AXA Andreas Giannopoulos Barclays Entris Raffael Goldenberger Nicolas Graafen **SIF** Stéphane Hegi **BCV** Thomas Kolb **SBB** Rolf Konrad **BKB**

Soeren Kretschmar – Deutsche Bank

Marcus Kriendlhofer – UniCredit Bank Austria

Sebastiaan Krist – Raiffeisen Colt-Spenser Lake – UBS

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
Elizabeth McGowan – Wells Fargo

Neil McLeod – Erste Group Bank AG

Christopher Meadowcroft – Credit Suisse

Franklin Meimoun – Union Bancaire Privée

Rolf Meyer – Bank CIC
Yusuf Mohammad – JP Morgan
Paolo Monticolo – Zurich
Michael O'Donovan – Zurich
Etienne Perret – UBS

Jacques Piasko–Julius BärStefan Pomberger–VontobelSusanne Ramer–SIX

Thomas Miguel Reeg – J. Safra Sarasin

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

Attila Santa – Erste Group Bank AG

Martin Scheck – ICMA
Daniel Schenker – ZKB
Beat Schlegel – Clientis

Sandro Schmid – Swiss Risk Association / AAAccell Henrique Schneider – Schweizerischer Gewerbeverband

Roland Schwab – Postfinance
René Schwyzer – LGT
Marco Steiner – Pictet

Roland Studer – Credit Suisse
Andrea Surro – EFG Bank
Isabelle Sutter – Bank CIC
Pierre-Henri Turc – BCGE
Matthias Vögeli – SwissLife
Hugues Weil – Credit Suisse

Philip Whitehurst – LCH

Christian Capuano Swiss Financial Market Supervisory Authority (FINMA) Anne Feidt Swiss Financial Market Supervisory Authority (FINMA) Roman Baumann Swiss National Bank, official sector representative Nicolà Eisler Swiss National Bank, official sector representative Basil Guggenheim Swiss National Bank, official sector representative Matthias Jüttner Swiss National Bank, official sector representative Silvio Schumacher Swiss National Bank, official sector representative Tanja Zehnder Swiss National Bank, official sector representative

National Working Group on CHF Reference Rates

24th Meeting, 7 May 2020

Agenda

- 1. Opening remarks
- 2. Using compounded SARON
 - 1. Market developments
 - 2. Corporate lending
 - 3. Mortgage lending
- SARON-based derivatives
- 4. LIBOR end-scenarios and fallback language
 - 1. LIBOR end-scenarios
 - 2. ISDA update
 - 3. Spread calculations
 - 4. Implications for CHF cash products
- 5. Operational readiness
- 6. Recommendations and next steps

1. Opening remarks



LIBOR replacement – FINMA position 2020

Relevant to Swiss banks and securities firms

7 May 2020



FINMA activities on LIBOR replacement in the banking sector

Sent **Dear CEO letters** to 43 banks and securities firms (risk-based selection).

Issued FINMA Guidance 03/2018

LIBOR: risks of potential replacement.

Three key risks identified: legal risks, valuation risks, operational readiness. Self-assessment by these firms by end of April 2019. Outcome: Significant progress still required to achieve a timely and orderly transition.

Issued FINMA Risk Monitor 2019.
LIBOR replacement highlighted
as 1 of 6 principal risks
for supervised institutions
and the Swiss financial center.

Sent **Dear CEO letters** to 26 banks and securities firms (coverage of 99.8% of LIBOR exposures* with maturity after 2021).

Self-assessment by these firms by end of May 2020. Quarterly repetition regarding (selected) quantitative LIBOR exposures.

2018 2019 2020

Throughout: dialogue with stakeholders such as largest and most exposed banks, groups of bank representatives, other Swiss authorities, and other regulators.

2021:

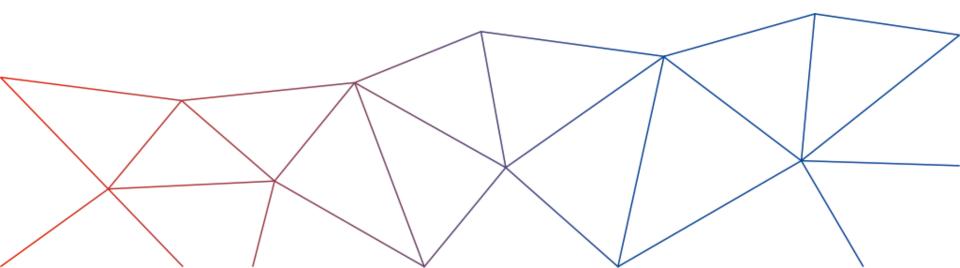
FINMA foresees **additional measures**, in case an insufficient reduction of CHF LIBOR-based cash product exposures or risk-increasing behaviors are observed until year-end 2020. Additional measures may include **Pillar 2 capital add-ons** (ERV Art. 45).



FINMA assumes that the CHF LIBOR will cease after year-end 2021.

- The FCA signaled on 25 March 2020 that despite the Corona pandemic, "the central assumption that firms cannot rely on LIBOR being published after the end of 2021 has not changed and should remain the target date for all firms to meet".
- SARON is already the most representative short-term money market rate today.
- Based on FINMA discussions with various stakeholders during March and April 2020, the Corona pandemic has not yet resulted in major delays to the LIBOR transition, nor are there major, structural obstacles for the transition of the CHF LIBOR cash market to the SARON.

Given the risk associated with the transition at the level of individual firms, FINMA recommends that each bank and securities firm impacted by the LIBOR transition (even if not among the 26 firms with most material exposures) satisfies the FINMA expectations voiced in the Dear CEO letters 2020. The relevant excerpt is provided in the following pages.





Excerpt of Dear CEO letter: FINMA expectations for 2020 (1/2)

- If not already done, identification of existing LIBOR-based contracts mature after 2021 and definition of a clear, robust and realistic strategy for substantially reducing these LIBOR exposures. This extends to all product types and includes plans for necessary negotiations to change contracts, e.g. for loans extending beyond 2021 or also derivative contracts with counterparties that do not fall under the remit of master agreements such as ISDA (for example, small to medium enterprises or ultra high net worth clients).
- 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.
- Regular provision of information about progress made by the International Swaps and Derivatives Association (ISDA) regarding the implementation of fallback terms in derivatives contracts. Making arrangements to ensure the operational readiness required for using the ISDA supplement and protocol promptly upon their publication.
- 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 SARON-based cash products.
- Careful and thorough testing of all IT systems, models and tools impacted by the replacement of LIBOR.
 Supervised institutions should also obtain statements from their relevant external IT providers regarding the readiness of their products for the LIBOR replacement.



Excerpt of Dear CEO letter: FINMA expectations for 2020 (2/2)

- Definition and implementation of a strategy to avoid damage from reputational and legal risks (for example, due to insufficient or incorrect information provided to clients) during the transition to alternative reference rates. This should also include internal directives and instructions concerning appropriate behavior towards clients.
- Development and implementation of a training program on the LIBOR replacement for employees, as well as
 provision of relevant guidelines for internal and external communication.
- Consideration of information and clarification aspects in issuing new products and changing existing contracts.
 Clients should be provided with sufficient lead time and information, allowing them to understand their options and costs and take well-founded decisions.
- If not already done, appointment of a member of the executive board with accountability for the LIBOR replacement.



FINMA support of BCBS statements on benchmark rate reforms

The Basel Committee on Banking Supervision published two statements relevant to the benchmark rate reforms:

- BCBS and IOSCO joint statement, dated 5 March 2019, on the final implementation phases of the international framework for initial and variation margin for non-centrally cleared OTC derivatives. FINMA supports this statement and refers to the FINMA Guidance 01/2020 Financial Market Infrastructure Act and Ordinance: derivatives trading.
- BCBS newsletter, dated 27 February 2020, on the benchmark rate reforms:

"The Committee is clarifying through this newsletter that, under the Basel Framework, amendments to capital instruments pursued solely for the purpose of implementing benchmark rate reforms will not result in them being treated as new instruments for the purpose of assessing the minimum maturity and call date requirements or affect their eligibility for transitional arrangements of Basel III."

FINMA supports this statement.

2. Using compounded SARON

Topics

- 1. Market developments
 - -SARON cash market
 - -Publication of compounded rates by SIX, Fed and the BoE
 - Update by SIX
- 2. Corporate lending
 - -Syndicated loans
 - -Bilateral corporate loans
 - Update on FRNs
- 3. Mortgage lending

2.1 Market developments

The SARON cash market is gaining traction

29 November 2019

UBS provides a <u>SARON real estate financing</u> as part of a pilot project

3 February 2020

Glarner Kantonalbank launches **SARON** retail mortgages

- The product is based on a five calendar day "Lookback" compounded SARON
- A negative compounded SARON will be floored on a 0% level

3 February 2020

The <u>Basler Kantonalbank</u> and <u>Entris Banking</u> announce a SARON based interbank transaction

15 April 2020

Raiffeisen <u>launches</u> SARON based <u>retail mortgages</u> and <u>business loans</u>

- The products are based on a «Plain» SARON compounded
- A negative compounded SARON will be floored on a 0% level

Visibility and usage of compounded SARON

Formula for compounding

Calculator

Index, i.e. SAION

SARON Compound Indices

Compounded SARON can be **calculated** by using all SARON values during the observation period

Compounded SARON can be **reproduced** by borrowers by selecting a start and end date in a web-tool. Non-business days can also be selected

Compounded SARON can be **calculated** by using SAION at the start and end date of the observation period. SAION is only available on business days

Compounded SARON is **provided** on business days for predefined time periods (1M, 3M, 6M). The start date is predefined

Available

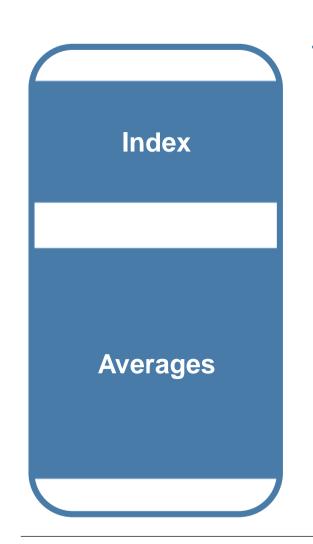
In development

Available

NEW

See also SIX webpage for further information

Increased visibility of compounded rates







GBP



USD

SAION

Available since 2009

SONIA Compounded Index

Currently under consideration

SOFR Index

Available since 2 March, 2020

SARON Compound Indices

1-,3-,6- month compounded rate Available since 25 March, 2020



SONIA Period Averages

1-,3-,6- month compounded rate or 30, 90, 180 days compounded rate

Currently under consideration

SOFR Averages

30, 90, 180 days compounded rate

Available since 2 March. 2020

Compounded SARON: Using the formula or the SARON Compound Indices?

In principle, there are two possibilities for a base rate in a contract: compounded SARON calculated with the formula documented in the SIX rule book or use of the SARON Compound Indices (e.g. SAR3MC)

	Formula for compounding	SARON Compound Indices	
Availability	SARON and SARON Compound Indices are published on business days by SIX		
Consideration of non-business days	Compounded SARON can be calculated for non-business days*	Only business days at start or end of interest rate period	
Length of interest rate period	Any	1, 3, and 6 month	
End of interest rate period	Any calendar day	Any business day (cf. Appendix for details)	
Accessibility for retail clients	Replication of any determination of the base rate in a web-based calculator	Easy to publish e.g. in media	

The indices might look easier to understand at first glance. However, the formula is far more flexible and needs no further explanations and adaptions if interest rate periods start or end on non-business days

*See SIX webpage for detailed formula

SIX went live with several enhancements

SARON Compound Indices

Compounded SARON data	Index values
SARON 1 month Compound index	a
SARON 3 months Compound index	Pa
SARON 6 months Compound index	Pa
SARON Compound calculation matrix	P3.

INDEX INFORMATION

Description	Download
Rules governing the Swiss Reference Rates	8
SARON Compound index methodology (short overview)	2

Enhancements

- SARON Compound Indices are now available for benchmarking and financial products. The methodology is included in the existing Swiss Reference Rate rule book (German / English)
- The NWG formula for a compounding on nonbusiness days was included in the overview document on the SIX website.

Outlook:

- Provide a calculator (web-based) on the SIX website to enable borrowers (free to use) to reproduce compounded SARON for flexible date combinations (includes non-business days)
- Documentations & factsheets (potentially in further languages)
- Completion of all above tasks expected by August 2020



Benchmark regulation / endorsement

- Several SIX indices including SARON and SAION were endorsed on January 21, 2020 and are listed in the ESMA register now
- A request was made to the relevant National Competent Authority (NCA) for the endorsement under the BMR of the SARON Compound indices
- See SIX index regulation website

SIX indices endorsed under EU Benchmark Regulation	Benchmark Statement	Methodology
Equity Indices:		
SMI, SMIM, SLI, SPI, SXI Real Estate Broad, SXI Real Estate Funds Broad, UBS100		
SMI Daily Short Leverage		2
SMI Dividend Points		2
Fixed Income and Money Market Indices:	2	
SBI Foreign AAA-BBB 1-5, SBI Foreign AAA-BBB 5-10, SBI Domestic Government 1-3, SBI Domestic Government 3-7		
SARON, SAION		2



SIX index licensing

- SARON Compound indices and the matrix are part of the index data package Swiss Reference Rates (SRR) and are subject to a license
- Existing licensees automatically have access (log-in to the SIX index data center needed)
- SIX published a FAQ on the licensing of the Swiss Reference Rates (SRR). This FAQ discusses the
 different SRR use cases and the corresponding licensing approach. It can be found here:
 https://www.six-group.com/exchanges/download/indices/saron_faq_en.pdf
- The SIX disclaimer and the registered trademark sign ® are optional in combination with SARON
- More information on licensing can be found here: https://www.six-group.com/exchanges/indices/data_centre/licensing_en.html



2.2 Corporate lending

Compounded SARON in the CHF syndicated loan market

 The syndicated loan market was the birthplace of LIBOR thirty-six years ago. As for any other market segment, the shift from a forward looking rate to a backward looking rate seems challenging but feasible



In mid 2019 the L&D working group set up a **sub-working group on syndicated loans**, with the aim of evaluating, whether a **compounded RFR rate can be used in a CHF syndicated loan deal**



Initial feedback was that a compounded RFR rate can not be used for CHF syndicated loans and international guidance should be awaited. However, during the discussions, members realized that cash flow certainty is only needed for a short period



Sub-working group members identified option 2. Lockout and option 3. Lookback to be suitable for syndicated loans. However, as working groups in other currency areas are favoring a lookback for loans, sub-working group members agreed to assess the lookback option in more depth

Findings from the sub-working group on syndicated loans

Recommendation for CHF syndicated loans:



The NWG recommends to use the **lookback** method for CHF syndicated loans with an **offset of 5 business days**

Additional remarks:

- Sub-working group members agreed, that uniformity of used methods across the different currencies is of the utmost importance
- Sub-working group members agreed, that lookback with an offset period of 3 to 5 business days would be feasible for syndicated loans. It is noted that parties might consider different offset periods based on borrower/lender needs or consistency with other currencies
- For very short dated loans, e.g. a loan where the interest period is shorter than the offset, other methods for using compounded SARON might be preferred (e.g. last recent)
- The parties to a syndicated loan might want to consider, how breakage costs are calculated for a RFR loan (e.g. a fixed prepayment penalty)

The use of compounded SARON in corporate lending

	Fixed advance (no benchmark)	Variable rate advance NEW (RFR based)	Overdraft
Product	 One period short term loan Drawdown under credit line (bilateral agreement at the beginning of each period) 	 One period short term loan Multi-period rollover loan* Drawdown under credit line 	Account
Notional	Fixed	Fixed for each period	Variable (i.e. fixed for one day)
Interest rate	Fixed	Variable	Variable
Interest calculation	At the beginning of the interest period (in advance)	Near or at the end of the interest period (in arrears)	Uses daily reference rate
Reasonable reference rate options	Internal-rate based	PlainLookbackPayment delay (for rollover)	Discretionary rateON RFR

^{*}Does not apply to syndicated loans

Summary of SARON FRN discussion and comparison to SOFR FRN

	Recommendation ARRC	Recommendation NWG / Implementation SIX
Compounded vs simple average	Compounded	Compounded
Margin treatment	Margin exclusive compounding	Margin exclusive compounding
In arrears vs. in advance framework	In arrears	In arrears
Conventions intended to allow for advance notice of payment	LockoutPayment delayLookback with an observation period shift	Lookback with an observation period shift
Published RFR observation time	3pm on publication date (t+1)	Shortly after 18:00 on publication date (t)
Business Day Convention	Modified Following	Modified Following
Calendar Adjustment	Same as SOFR	Same as SARON
Day Count Convention	Accrual Period divided by 360	Act/360
RFR fallback	ARRC Recommendation	NWG Recommendation
Negative interest rates	Floor the entire coupon (SOFR for the interest period plus the margin) at zero	Floor the entire coupon (SARON for the interest period plus the margin) at zero

2.3 Mortgage lending

Update on the legitimacy of using compounded SARON

Recapitulation: Art. 314 Swiss Code of Obligation prohibits to add interest to the loan principal such that it becomes subject to further interest (subject to business standard practices). Art. 314 Swiss Code of Obligation (and Art. 248 BGB) has its root in the prevention of usury and its purpose is the clarity of interest

- Glanzmann (NWG June 2019): Compounded SARON is no circumvention because of the clarity of interest, it is sufficient that interest payments are «determinable» by a formula (cf. a fixed rate loan where interest payments are «determined»)
 The co-chairs have asked him to elaborate further on his argument; a statement will be published on the NWG website in due time (in German)
- Brändli (publication December 2019): Borrowers shall get sufficient information about the calculation method to have clarity on interest such that a conflict with Art. 314 is avoided
- Mülbert/Sajnovits (publication September 2019 on Art. 248 BGB, the similar rule in German law):
 A compounding formula is a mathematical expression of an interest rate and does not include by itself paying interest on interest. Compounded alternative reference rates are compliant with Art. 248 BGB

Customer information on interest rate calculation

In Switzerland, there are no legal requirements on customer information for loans except for lombard and consumer loans

However, there is little doubt that customers shall get sufficient information to understand the product and to make an educated decision. Information on the interest rate calculation is key.

Market information (provided by NWG and SIX)

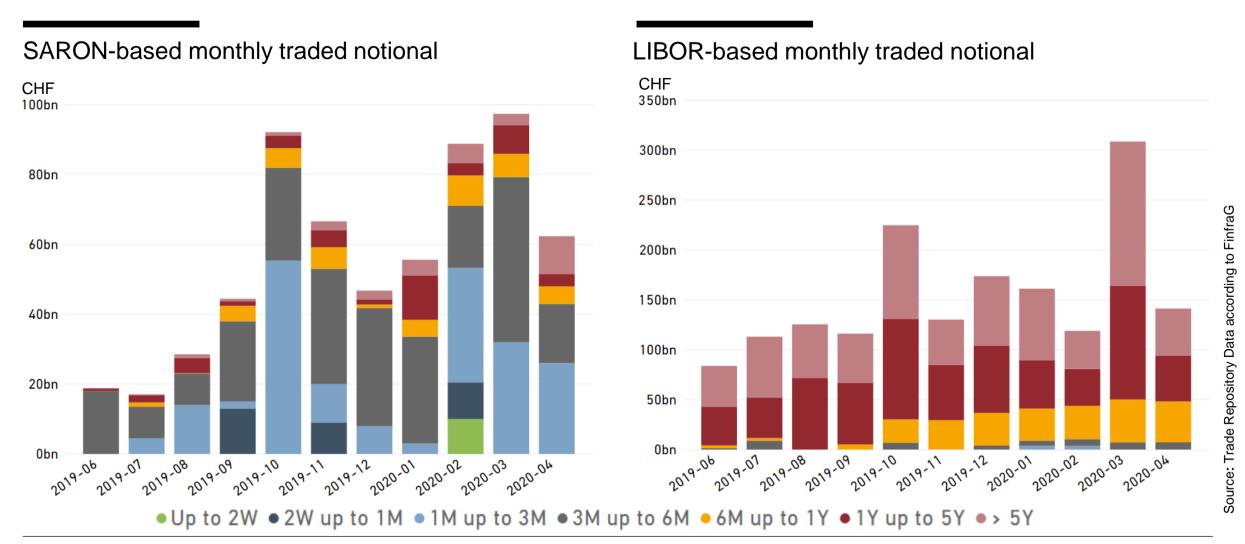
Product information (provided by the bank)

- Options for using compounded SARON in loans presented in NWG
- Compounding formula documented in SIX rulebook (see also <u>short overview</u>)
- SARON, SAION and SARxMC publicly available
- Web-based calculator provided by SIX

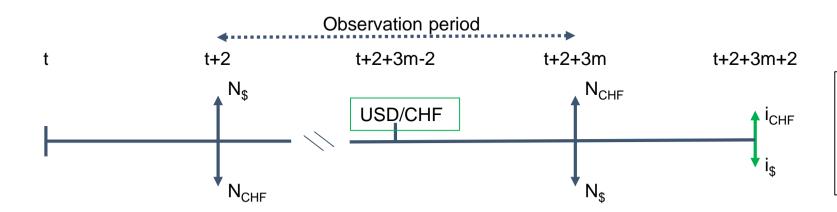
- Contract: link to SIX rulebook or use of the formula therein
- Marketing material shall help the customer to make an educated decision

3. SARON-based derivatives

Traded notional referencing SARON is increasing but remains small compared to LIBOR-based notional



Consider "payment delay" for a USD/CHF CCBS based on RFRs for the interdealer market



- Initial notional exchange: t+2
- Observation period: t+2 to t+2+3m
- FX rate fixing: t+2+3m-2
- Reset of notional: t+2+3m
- Interest payment: t+2+3m+2

Pros: aligned with OIS market

- Interest period matches observation period
- In line with both OIS legs
- Perfect hedge on OIS and economics (on new RFR) for at least one currency

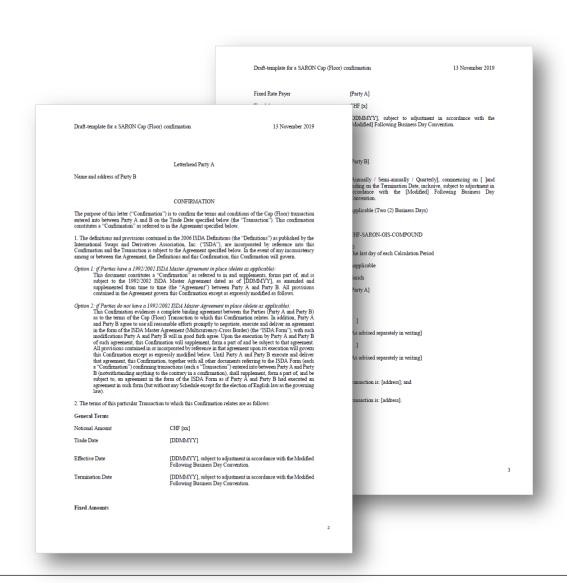
Cons: split of payments

- Misalignment between interest and notional payments
- Twice as many cash flows at the end of the contract

- Consider «payment delay» for USD/CHF CCBS for the interdealer market
- A term sheet will be made available on the NWG website

Draft-template for a SARON cap (floor) confirmation has been updated

- The draft-template for a SARON cap (floor) confirmation has been updated to be used under ISDA language
- The new version will be published after the meeting



4. LIBOR end-scenarios and fallback language

Topics

- 1. LIBOR end-scenarios
- 2. ISDA update
- 3. Spread calculations
- 4. Implications for CHF cash products

4.1 LIBOR end-scenarios

Summary of terminology (based on ISDA)

Announcement date

- Statement that LIBOR will be ceased, i.e. discontinued
- Statement by the regulator¹ that LIBOR will become non-representative
- Announces the "Replacement date"

Replacement date

- Date on which LIBOR is replaced with the fallback rate, because ...
 - a) LIBOR is ceased / discontinued or
 - b) LIBOR is no longer representative (ISDA consultation)

Fallback rate (also called Benchmark Replacement)

- Replaces LIBOR at replacement date
- Equals compounded RFR (variable, backward shift) plus spread (fixed)
- Compounded RFR, spread and the "all in rate" will be published e.g. by Bloomberg (ISDA FAQ)

¹⁾ According to the EU BMR also the administrator could announce loss of representativeness.

Who could trigger the end of LIBOR?

IBA

- In case there is no successor administrator, IBA can announce a voluntary discontinuation
- Intends to give at least one year's notice prior to a voluntarily cessation (<u>Cessation</u> procedure)
 - → Scenario A, via voluntary discontinuation

FCA

- FCA expects banks to leave panels after end-2021 (speech in November 2019)
- FCA expects LIBOR to cease or to lose representativeness after end-2021 (<u>statement</u> in March 2020)
- Announcements could be made before end-2021 (<u>statement</u> in March 2020)
- Expects non-representative LIBOR only for a few months, not years (see <u>letter</u> to ISDA, January 2020)
- Assessment of representativeness in certain circumstances, such as the departure of panel banks, or in any event every two years (<u>FSB letter</u>, March 2019)
 - → Scenario B, via loss of representativeness...
 - Exit of panel banks
 - Assessment of representativeness every two years

Timing of the scenarios

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

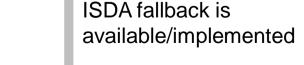
...

Announcement date

Replacement date

Spread calculation

♣ Date of cessation



Q4 2020

End-2021

...

Scenario A

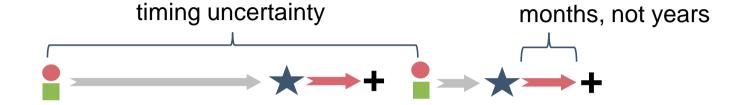
IBA announces to cease at end-2021

at least one year

*

Scenario B

FCA announces loss of representativeness



One possible combination of scenario A and B Announcement date Replacement date Spread calculation Date of cessation Final ISDA fallback is available/implemented **End-2021** Q4 2020 For one or more LIBOR currency Scenario A IBA announces to cease at end-2021 For other LIBOR currency-tenor pairs Scenario B FCA announces loss of representativeness

4.2 ISDA update

ISDA IBOR Fallbacks



May 2020

IBOR Fallbacks: ISDA's Work – Rates and Triggers

- ISDA is currently undertaking work to amend the 2006 ISDA Definitions to implement fallbacks for: LIBOR in GBP/CHF/USD/EUR/JPY, EURIBOR, JPY TIBOR, Euroven TIBOR, BBSW, CDOR, HIBOR and SOR (the IBORs).
- The fallbacks apply upon the *permanent discontinuation* of the relevant IBOR (based on pre-determined, objective triggers) and will be to the relevant alternative risk-free rate (RFR), subject to term and spread adjustments. The *permanent discontinuation* trigger is defined as "Index Cessation Event"* in the non-LIBOR Rate Options.
 - The fallbacks will not apply until the actual discontinuation of the relevant IBOR (if that is after the announcement date). This date is defined as the "Index Cessation Effective Date".
- For LIBOR in GBP/CHF/USD/EUR/JPY, the fallbacks apply upon the earlier of (i) the permanent discontinuation or (ii) the non-representativeness (as determined by the UK FCA) (a so-called "pre-cessation" event) of LIBOR in the relevant currency (based on pre-determined, objective triggers) and will be to the relevant alternative RFR, subject to term and spread adjustments. The combined permanent discontinuation and pre-cessation trigger is also defined as "Index Cessation Event"** in the LIBOR Rate Options.
 - The Index Cessation Effective Date for the pre-cessation trigger will be the date on which LIBOR in the relevant currency 'is no longer representative', which may either coincide with or be after the date of an announcement that it is 'no longer capable of being representative'. The Index Cessation Effective Date for LIBOR in the relevant currencies will be the earlier of (i) the actual discontinuation or (ii) the date on which LIBOR in the relevant currency 'is no longer representative'
 - Report analyzing results of 2020 consultation on pre-cessation fallbacks will be published in early May. Information about the
 consultation and the prior 2019 consultation on pre-cessation fallbacks is available at
 https://www.isda.org/2020/01/10/benchmark-fallback-consultations/



IBOR Fallbacks: ISDA's Work – Triggers

- "Index Cessation Event" means:
 - a public statement or publication of information by or on behalf of the administrator of [the relevant IBOR] announcing
 that it has ceased or will cease to provide [the relevant IBOR] permanently or indefinitely, provided that, at the time of
 the statement or publication, there is no successor administrator that will continue to provide [the relevant IBOR]; or
 - a public statement or publication of information by the regulatory supervisor for the administrator of [the relevant IBOR], the central bank for the currency of [the relevant IBOR], an insolvency official with jurisdiction over the administrator for [the relevant IBOR], a resolution authority with jurisdiction over the administrator for the [the relevant IBOR] or a court or an entity with similar insolvency or resolution authority over the administrator for [the relevant IBOR], which states that the administrator of [the relevant IBOR] has ceased or will cease to provide [the relevant IBOR] permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide [the relevant IBOR].
 - [FOR LIBOR ONLY:] a public statement or publication of information by the regulatory supervisor for the administrator of [LIBOR in the relevant currency] announcing [(a)] that [LIBOR in the relevant currency] is no longer, or as of a specified future date will no longer be, capable of being representative, or is non-representative, of the underlying market and economic reality that [LIBOR in the relevant currency] is intended to measure as required by applicable law or regulation and as determined by the regulatory supervisor in accordance with applicable law or regulation [and (b) that the intention of that statement or publication is to constitute a trigger for fallbacks in derivative contracts].
- Statement from the UK FCA regarding announcement of contractual triggers for LIBOR available at https://www.fca.org.uk/markets/transition-libor/libor-contractual-triggers



IBOR Fallbacks: Adjustments to Fallback Rates

Bloomberg will publish (i) the compounded setting in arrears rate, (2) the spread adjustment and (3) the 'all in' fallback rate on a daily basis

- Publication will be on an indicative basis (i.e., 'as if' the fallbacks were triggered on the publication date)
 - Upon the occurrence of an 'Index Cessation Event' for the relevant IBOR, the spread adjustment will be set (but the indicative compounded setting in arrears rate and 'all in' fallback rate will continue to change on a daily basis). Contracts will continue to reference the relevant IBOR until the 'Index Cessation Effective Date' occurs.
 - Upon the occurrence of an 'Index Cessation Effective Date' for the relevant IBOR, contracts that continue to reference the relevant IBOR will reference the 'all in' fallback rates (which will include the spread adjustment that was set on the date of the 'Index Cessation Event' but with changing compounded setting in arrears rates and 'all in' fallback rates)
- Expected Bloomberg publication schedule:
 - Rulebook for final methodology published April 22, 2020. Available at http://assets.isda.org/media/34b2ba47/c5347611-pdf/.
 - Publication of test data expected on an IBOR-by-IBOR basis, starting around the end of April.
 - Full connectivity via Bloomberg terminal, API and Bloomberg website (including for free on a delayed basis) expected around the end of June.
- FAQs (to be updated from time-to-time) available at http://assets.isda.org/media/ddcb20e0/76dd3ab8-pdf/



IBOR Fallbacks: Looking Ahead

• Later 2020:

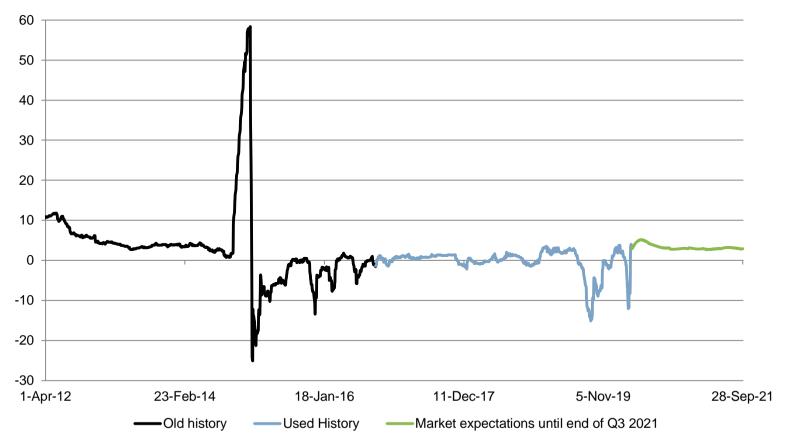
- Full connectivity to Bloomberg indicative fallback rates: Around the end of June 2020
- Publication of final form of Supplement to the 2006 ISDA Definitions and of ISDA 2020 IBOR
 Fallbacks Protocol (and relevant bilateral templates, FAQs, etc.): Targeting July 2020
- Effectiveness of Supplement to the 2006 ISDA Definitions and of ISDA 2020 IBOR Fallbacks
 Protocol: 4 months after publication
- ISDA/Bloomberg/Linklaters white paper on fallbacks methodology and relevant contractual provisions: May 2020



4.3 Spread calculations

History of spread between CHF 3M LIBOR and 3M compounded SARON

CHF 3M LIBOR vs 3M Compounded SARON

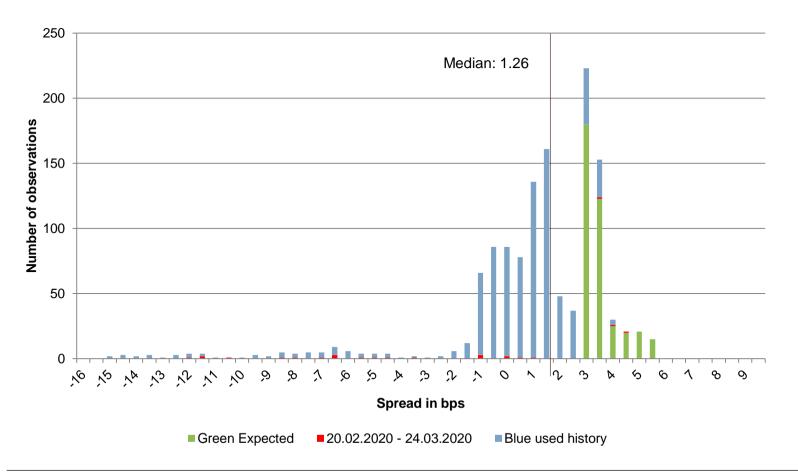


- The ISDA spread calculation is based on a 5-year history.
 With the assumption that CHF LIBOR is announced to be discontinued on 31
 December 2021, the relevant data range is from the end of Q3 2016 to the end of Q3 2021
- There are 877 known observations and 384 expected observations as of 25 March 2020¹

¹⁾ Old history = Before 29 September 2016, Used History = 29 September 2016 until 24 March 2020, Market expectations = 25 March 2020 until 28 September 2021

5y lookback spread distribution between CHF 3M LIBOR and 3M compounded SARON

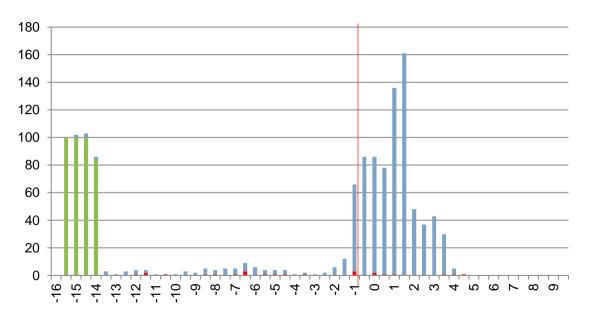
Possible spread distribution



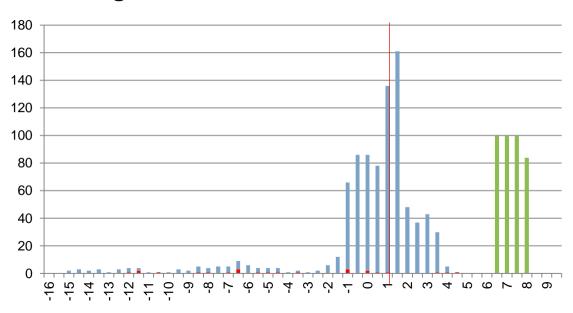
- Based on the spread history from the end 2016 to the end of March 2020 and the market expectations from April 2020 to the end of 2021, the spread median is expected to be around 1.3bps
- Meaning that when transitioning, instead of CHF
 3M LIBOR, you would receive 3M compounded
 SARON + 1.3bps

5y lookback spread distribution between CHF 3M LIBOR and 3M compounded SARON – stressed values

Median low estimate: -0.6



Median high estimate: 1.3

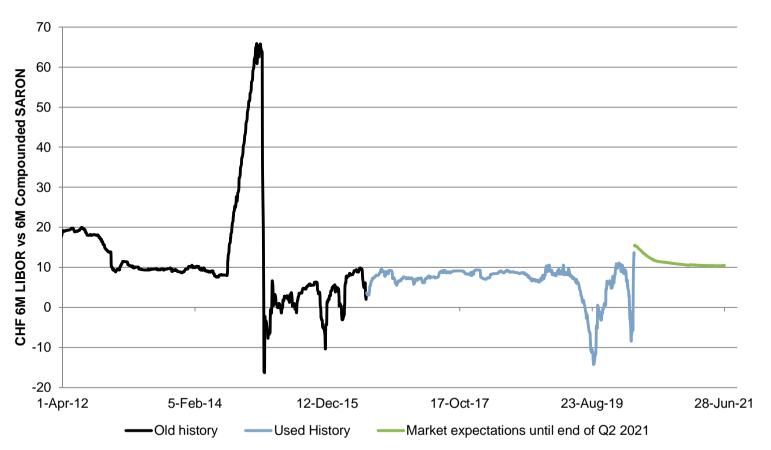


- The expected future values are all moved to either left or right of the distribution. How far the tails are is not relevant in a median
- The current expected median of 1.3bps moves in a range of -0.6bps to 1.3bps if all unknown future observations are stressed

07.05.2020 24th NWG on CHF Reference Rates SNB BNS ↔

History of spread between CHF 6M LIBOR and 6M compounded SARON

CHF 6M LIBOR vs 6M Compounded SARON

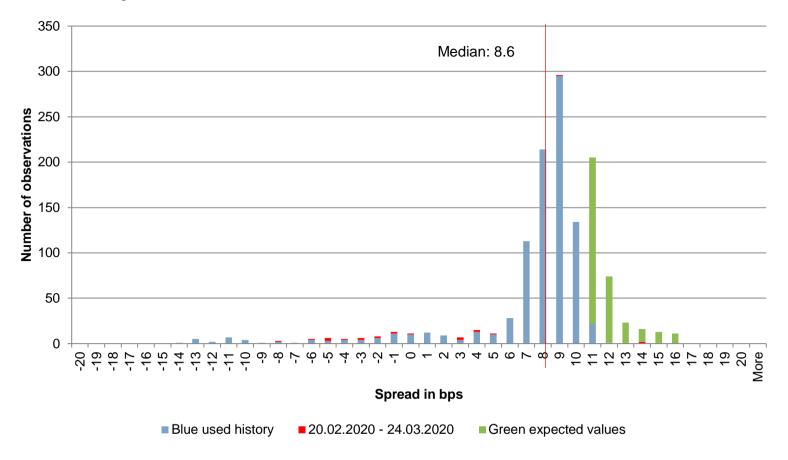


- The ISDA spread calculation is based on a 5-year history.
 With the assumption that CHF LIBOR is announced to be discontinued on 31
 December 2021, the relevant data range is from the end of Q2 2016 to the end of Q2 2021
- The are 942 known observations and 317 expected observations as of 25 March 2020¹

¹⁾ Old history = Before 29 June 2016, Used History = 29 June 2016 until 24 March 2020, Market expectations = 25 March 2020 until 28 June 2021

5y lookback spread distribution between CHF 6M LIBOR and 6M compounded SARON

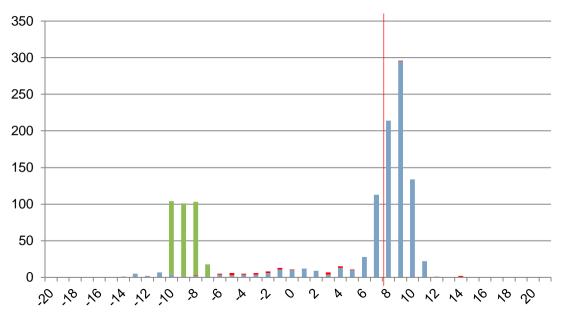
Possible spread distribution



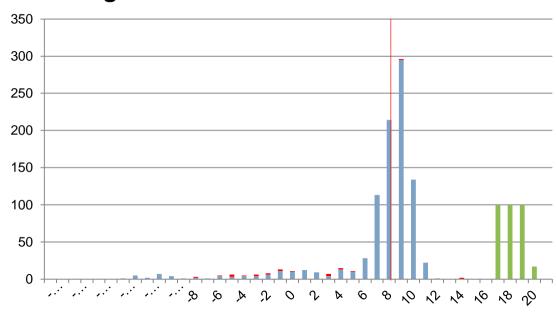
- Based on the spread history from the end 2016 to the end of March 2020 and the market expectations from April 2020 to the end of 2021, the spread median is expected to be around 8.6bps
- Meaning that when transitioning, instead of CHF
 6M LIBOR, you would receive 6M compounded
 SARON + 8.6bps

5y lookback spread distribution between CHF 6M LIBOR and compounded SARON – stressed values

Median low estimate: 7.2



Median high estimate: 8.6



- The expected future values are all moved to either left or right of the distribution. How far the tails are is not relevant in a median
- The current expected median of 8.6bps moves in a range of 7.2bps to 8.6bps if all unknown future observations are stressed

07.05.2020 24th NWG on CHF Reference Rates SNB BNS ↔

5y lookback spread CHF - conclusion

- In CHF, the ISDA spread adjustment will likely not move materially anymore.
 This is due to the median calculation and a very stable history
- Nevertheless, the ISDA spread adjustment could be materially different from the spot LIBOR-OIS basis at the moment of calculation and cessation¹

Market participants should transition LIBOR exposures prior to end-2021 wherever possible

1) A mechanism to mitigate such effect was rejected by a majority of the respondents to the ISDA Consultation

4.4 Implications for CHF cash products

Focus on ISDA, but not all fallbacks might align with ISDA

Fallback landscape

Fallbacks

Derivatives

- ISDA protocol
- 🛂 SBA master agreement
- CCP protocols

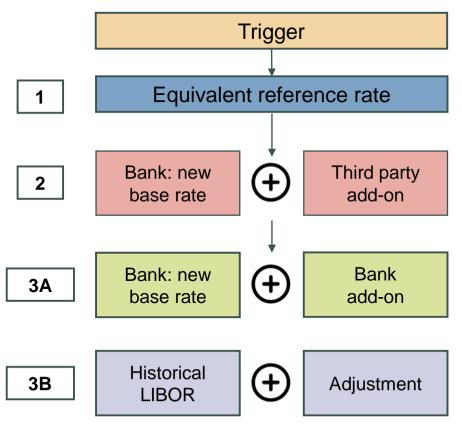
Loans

- FRN discussion paper
- Bilateral under Swiss law
- LMA recommendation

Focus on ISDA¹

- ISDA <u>consulted</u> on pre-cessation trigger (February 2020)
- ISDA currently <u>expects</u> to include pre-cessation and permanent cessation fallbacks. Initial results indicate a majority of respondents are in favour (April 2020)
- The ISDA protocol is the standard for the derivatives market.
 ISDA's consultation outcomes now determine the fallback design (conditional on the final template and market acceptance): trigger and spread adjustment are defined
- Fallbacks should be aligned across cash and derivatives contracts to reduce basis risks

Recap: fallback language proposed by Homburger



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

5. Operational readiness

Broad range of infrastructure providers that offer various services and products participated in the webinar in February 2020



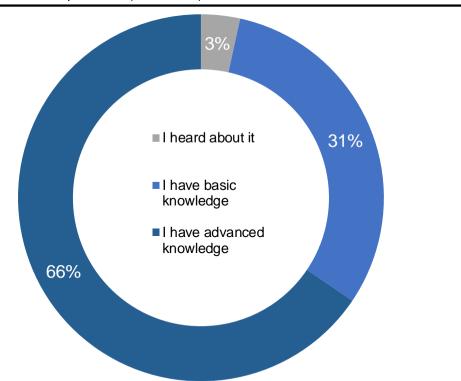
Most infrastructure providers are well informed about LIBOR transition

2020

59

HOW FAMILIAR ARE YOU WITH THE LIBOR TRANSITION TOPIC?

No. of respondents (institutions): 29

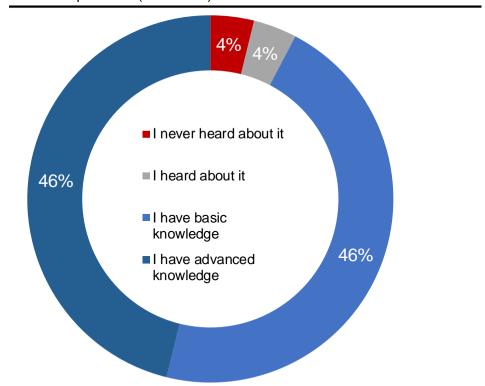


Source: National Working Group on Swiss Franc Reference Rates

2019

HOW FAMILIAR ARE YOU WITH THE LIBOR TRANSITION TOPIC?

No. of respondents (institutions): 26



Source: National Working Group on Swiss Franc Reference Rates

07.05.2020 24th NWG on CHF Reference Rates SNB BNS ⊕

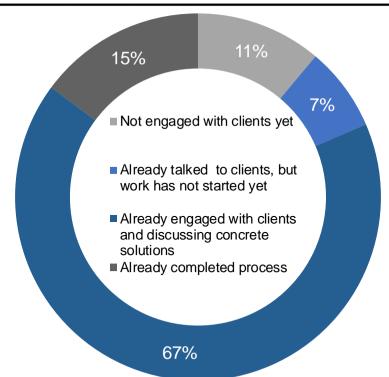
Most infrastructure providers are in contact with their clients regarding the LIBOR transition

2020

60

ARE YOU ALREADY ENGAGED WITH CLIENTS REGARDING THE LIBOR TRANSITION?

No. of respondents (institutions): 27

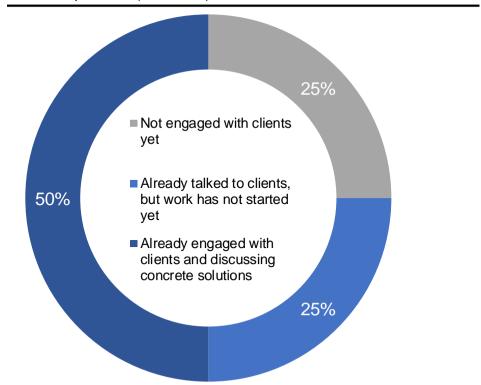


Source: National Working Group on Swiss Franc Reference Rates

2019

ARE YOU ALREADY ENGAGED WITH CLIENTS REGARDING THE LIBOR TRANSITION?

No. of respondents (institutions): 28



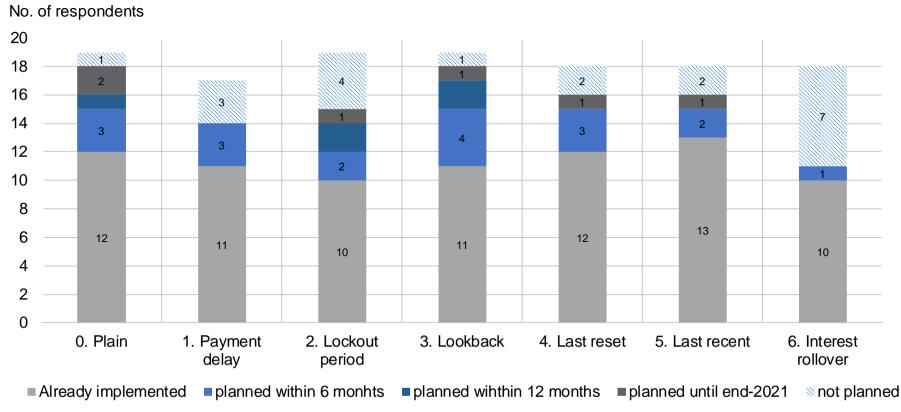
Source: National Working Group on Swiss Franc Reference Rates

07.05.2020 24th NWG on CHF Reference Rates SNB BNS ⊕

Recommended options for compounded SARON are being implemented

WHICH OPTIONS HAVE YOU / DO YOU PLAN TO IMPLEMENT AND WHEN WILL THEY BE RELEASED TO CUSTOMERS?

No. of respondents (institutions): 19



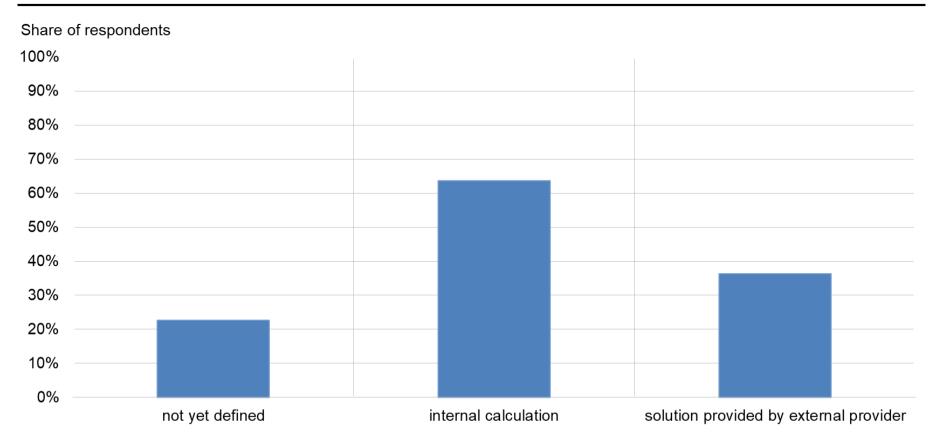
Source: National Working Group on Swiss Franc Reference Rates

61 07.05.2020 24th NWG on CHF Reference Rates SNB BNS ♀

Compounded RFRs are typically calculated within systems

HOW HAVE YOU / DO YOU PLAN TO INCORPORATE COMPOUNDED RFRS?

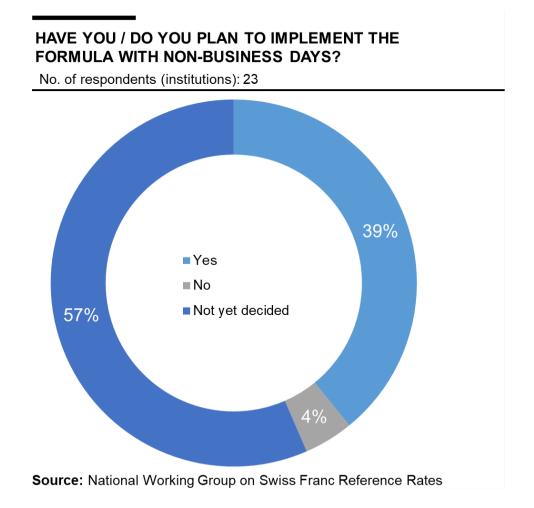
No. of respondents (institutions): 22

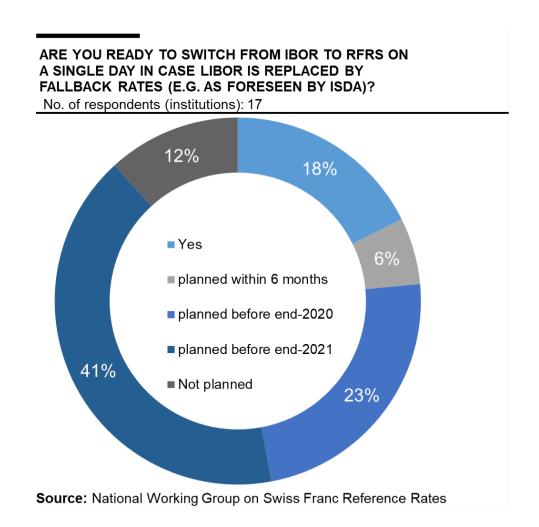


Source: National Working Group on Swiss Franc Reference Rates

62 07.05.2020 24th NWG on CHF Reference Rates SNB BNS ⊕

Still some uncertainty with regard to treatment of non-business days – switch to fallbacks will mostly be implemented until end-2021





07.05.2020 24th NWG on CHF Reference Rates SNB BNS ⊕

6. Recommendations and next steps

Recommendations

- Use the lookback method for CHF syndicated loans with an offset of 5 business days
- Consider "payment delay" for a USD/CHF CCBS based on RFRs for the interdealer market
- Market participants should transition LIBOR exposures prior to end-2021 wherever possible
- —At the last NWG meeting it was recommended to consider the usage of a precessation trigger. This recommendation supports the alignment with ISDA's fallback language and therefore between cash and derivatives contracts

Next steps

- The CCBS and the amended cap (floor) term sheets will be made available on the NWG website
- 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 (all)
- 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 (all)
- NWG sub-working groups develop a FAQ for a better overview of topics and recommendations covered by the NWG (all)

Next NWG meeting and publication of results

- Next NWG meeting is scheduled for 29 September
- Publication of NWG's recommendations
 - -Short summary of the meeting by 8 May 2020
 - -Meeting minutes will be published on NWG website

Appendix

Details on SARON Compound Indices

Example: SARON 3 months Compound Index (SAR3MC)

end date	start date	SAR3MC	daycount	
9.04.20	9.01.20	-0.7019	91	
8.04.20	8.01.20	-0.7024	91	
7.04.20	7.01.20	-0.7029	91	
6.04.20	6.01.20	-0.7033	91	
3.04.20	3.01.20	-0.7043	91 -	
2.04.20	3.01.20	-0.7048	90	Several end dates can have the same start date
1.04.20	3.01.20	-0.7054	89	
31.03.20	31.12.19	-0.7042	91	In case the end date is a quarter end, the start
30.03.20	30.12.19	-0.7044	91	date will always be the previous quarter end

- SAR3MC can be used in contracts. However, as the start date is pre-determined minor differences can occur in contrast to the Calculator
- Further information can be found in the <u>SIX SARON rulebook</u>