Press release

(For meeting minutes, please see page 4 ff.)

National Working Group on Swiss Franc Reference Rates

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Executive summary of the 1 July 2021 meeting of the National Working Group on Swiss Franc Reference Rates

The National Working Group on Swiss Franc Reference Rates (NWG) met on 1 July 2021 to discuss the progress of the LIBOR transition in Switzerland and relevant international developments.

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

- (i) Members reviewed important milestones regarding the transition from LIBOR. First, ICE Benchmark Administration (IBA) and the UK Financial Conduct Authority (FCA) released on 5 March 2021 their statements confirming that all Swiss franc (CHF) LIBOR settings will cease immediately after the LIBOR publication on 31 December 2021. Second, with the publication of the IBA statement, ISDA adjustment spreads for all LIBOR settings were fixed. There will be no synthetic rate for CHF LIBOR.
- (ii) FINMA provided an update on their self-assessment survey, according to which a large fraction of the cash market already transitioned to SARON but some market participants still need to accelerate their reduction of legacy LIBOR contracts. Furthermore, FINMA emphasized that it is important to timely meet the deadlines of the FINMA Guidance 10/2020 (LIBOR transition roadmap). After 30 June 2021, new contracts should in general be based on alternative reference rates (e.g. SARON and SOFR). FINMA reminded members that full operational readiness is required by 31 December 2021.
- (iii) Regarding options for using compounded SARON, members reviewed the guidance given so far. In case the rate needs to be known in advance, the Last Recent option is also a reasonable choice, in addition to the option Last Reset. A

- shorter observation period allows to reflect a new interest rate environment faster. A one-month observation period seems appropriate, since it provides a good balance between adaptability and volatility. Hence, *the NWG recommended to also consider the option Last Recent and the SARON 1M Compound Rate*.
- (iv) Members acknowledged that many participants of syndicated loans have repapered their contracts based on the Rate Switch Amendment Agreement presented at the 26th NWG meeting. However, not all market participants have taken the necessary steps, yet. Consequently, the NWG recommended that all Lead Arrangers of LIBOR-based syndicated loans maturing after 2021 reach out to syndicate participants and borrowers as soon as possible to arrange the switch to a RFR. Likewise, the NWG recommended that all participants in syndicated loans and borrowers proactively contact the Lead Arrangers and request such a switch. Furthermore, it was mentioned that the RFR documentation by LMA is now available in its recommended form.
- (v) Members were briefed on the results of the working group on trade finance that discussed potential solutions for CHF Discount Products. *The NWG recommended the use of either Last Recent SARON 1M Compound Rate or e.g. for sophisticated institutions Cost of Funds based upon the individual weighting of the need of a public benchmark vs. the need of hedgeability.*
- (vi) At the 26th meeting of the NWG, SARON 1M Compound Rate and using the option Last Recent were discussed for intercompany loans in CHF. Since then, an outreach to Swiss corporates was conducted to review this proposal. Two key features were identified, which are relevant for intercompany loans. First, using a benchmark simplifies approval by tax authorities. Second, using a rate that is known at the beginning (i.e. in advance) matches existing methods. Based on the similar recommendation of the ARRC and in response to the NWG outreach, the NWG recommended to consider the option Last Recent and the SARON 1M Compound Rate for intercompany loans in CHF.
- (vii) Members discussed the transition to SARON in swap markets. As of May 2021, turnover in the CHF swap market was 60% SARON-based. The NWG repeated its recommendation to transition bilateral and cleared derivatives ahead of year-end 2021 (transition now) and reminded participants that fallbacks are just a "safety belt".
- (viii) In order to promote a smooth transition to SARON in CHF derivative markets, the NWG recommended start dates for using only SARON as single price reference and benchmark in derivative markets:
 - a. The NWG recommended that all market participants (investors and issuers) switch to the SARON swap curve as the only pricing reference starting 1 September 2021, at the latest.

- b. The NWG recommended using only SARON-based derivatives for new transactions starting from 1 July 2021, excluding transactions that reduce or hedge LIBOR exposures.
- c. The NWG supported both dates, which are currently being discussed internationally − 7 and 21 September 2021 − as start dates to switch quoting conventions of cross-currency swaps in all five LIBOR currencies to RFR (i.e. SOFR, SONIA, TONA, €STER and SARON).
- (ix) For CHF, there is no benchmark for the LIBOR swap curve and therefore a fallback rate is not necessary. However, the CHF LIBOR swap curve is indicatively used, e.g. for CHF hybrid bonds, where the NWG issued a recommendation at its 26th meeting. The CHF LIBOR swap curve is also indicatively used in other products. *The NWG recommended using a similar formula as recommended for CHF hybrid bonds for derivative products referencing the CHF LIBOR swap curve (e.g. swaptions), but with additional technical adjustments (formula will be included in the full minutes).*
- (x) Members discussed the <u>support</u> by the Financial Stability Board to use the ISDA spread adjustments in cash products. The NWG already recommended using ISDA spread adjustments for specific products. At its meeting yesterday, the NWG recommended using compounded SARON and, in case a spread adjustment is applied, CHF ISDA spreads as a reference point for a fallback rate for CHF LIBOR for all kind of products if no other fallback rate is specified.
- (xi) As a last item, a possible in-advance fallback methodology for CHF LIBOR was discussed. The NWG recommended, in case the fallback rate needs to be known in advance and no other fallback rate is specified, to consider the Last Recent option and the SARON 1M Compound Rate for compounded SARON in the fallback methodology. Hence, e.g. for a fallback rate for CHF 6M LIBOR, the recommendation if no other fallback rate is specified and the fallback rate needs to be known in advance is to consider SARON 1M Compound Rate in-advance and the CHF 6M ISDA spread as a fallback rate for CHF 6M LIBOR.

The minutes of the meeting will be published in due course on the <u>NWG website</u>.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 1 July 2021 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 27th meeting and reminded them of their responsibilities related to <u>competition law and confidentiality</u>. The meeting was held virtually for the fourth consecutive time.

2. End of LIBOR – Announcements by IBA and FCA

- NWG members reviewed important milestones regarding the forthcoming cessation of the various LIBOR settings that was announced by the Financial Conduct Authority (FCA) and the ICE Benchmark Administration (IBA) on 5 March 2021. First, CHF and EUR LIBOR will completely cease to exist after 31 December 2021. Second, some GBP and JPY LIBOR settings (1M, 3M, 6M) will be replaced by a synthetic version of the rate, which can only be used in legacy contracts and not for new business (in the UK Benchmark regulation its use is restricted to tough legacy) whilst the others (ON/SN, 1W, 2M, 12M) will be discontinued. Third, for the USD LIBOR, only the 1W and the 2M tenors will be ceased at end-2021. The remaining tenors (1M, 3M, 6M and 12M) shall, however, only be used for legacy contracts and will be discontinued at the end of June 2023.
- Furthermore, an update on (forward-looking) term rates (based on RFR-derivatives) in several jurisdictions was provided. The Alternative Reference Rates Committee (ARRC) has not yet formally recommended a Secured Overnight Financing Rate (SOFR) term rate but has already selected CME Group as administrator of a possible term rate. The group currently publishes a SOFR-based term rate, which can be used for cash products until end-June 2023. In the GBP market, official SONIA term rates were launched on 11 January 2021 by Refinitiv Benchmark Services Limited and ICE Benchmark Administration for the 1M, 3M, 6M and 12M tenors. In the euro area, potential administrators are working on an €STR term rate and for the Tokyo Term Risk Free Rate (TORF), QUICK Benchmarks Inc. began publishing production term reference rates on 26 April 2021. Finally, it is important to note that a SARON term rate was neither recommended by the NWG nor is there any work ongoing to create one due to insufficient liquidity in the derivatives market on which a reliable term rate should be based on. In jurisdictions with planned or existing derivativebased term rates, the usage of such term rates cannot be restricted in contrast to synthetic rates. However, regulators strongly recommend to use these term rates only to a limited extent (see e.g. speech by Andrew Bailey).
- Two important milestones in the <u>FINMA Guidance 10/2020</u>, which is based on an international <u>roadmap</u> by the Financial Stability Board (FSB), were covered. First, that by 30 June 2021, system and process changes should be implemented, risks for remaining "tough

legacies" should be mitigated and new contracts should in general be based on risk-free rates (RFRs). Second, full operational readiness should be ensured by market participants and all new contracts should be based on RFRs by 31 December 2021.

3. Update by FINMA

A representative of FINMA informed about the progress of the LIBOR transition of the 20 most heavily impacted domestic banks and securities firms, as reported through the monthly self-assessments. Overall, the large majority of banks (> 75%) is on track to fulfill the milestones communicated in the FINMA Guidance 10/2020, which covers all currencies. However, some further progress needs to be made in areas such as operational readiness, proactive outreach to counterparties (e.g. for syndicated loans) and in refraining from entering into new LIBOR contracts. FINMA has reached out to institutions lagging behind in order to address the concerns. Moreover, the representative provided clarification on the element of the FINMA Guidance 10/2020 that stated that the June and December 2021 milestones apply for the USD LIBOR as well. In that respect, FINMA recognizes that there might be limited circumstances for market participants to enter into new USD LIBOR contracts after 31 December 2021 such as (i) transactions executed for purposes of required participation in a central counterparty auction procedure in the case of a member default, including transactions to hedge the resulting USD LIBOR exposure; (ii) market making in support of client activity related to USD LIBOR transactions executed before 1 January 2022; (iii) transactions that reduce or hedge the bank's or any client of the bank's USD LIBOR exposure on contracts entered into before 1 January 2022; and (iv) novations of USD LIBOR transactions executed before 1 January 2022. Under such circumstances an exception to the FINMA Guidance 10/2020 is appropriate.

4. SARON-based cash products

4.1. Market developments

- NWG members were given a recapitulation on the guidance for using compounded SARON from the 23rd NWG meeting, which centered on the three options Plain, Lookback and Last Reset. Since then, further banks in Switzerland have launched SARON-based cash products with most of them using the Lookback option. The client feedback has been very positive so far.
- After having a deep dive on the option Last Recent, the NWG agreed to expand the above mentioned guidance for using compounded SARON with the option Last Recent, especially for the use as a fallback rate. Additionally, the NWG decided that the SARON 1M Compound Rate is reasonable in case the option Last Recent is used for this purpose. This seems appropriate as this time frame provides a good trade-off between adaptability in case of fast interest rate changes and the overall volatility of such a rate. As for other standard tenors, the determination of the SARON 1M Compound Rates by SIX simplifies the usage as it is already published and therefore does not need to be calculated.

- A representative from the SIX Financial Information AG informed the meeting attendees about the following points:
 - o SIX's rulebook now includes formulas for calculating compounded SARON based on either the "lag" or "shift" methodology.
 - Further tenors for SARON Compound Rates/Indices have been published. For illustrative purposes, these are, lagged by one day, available without a license on the webpage.
 - A Correction/Republication policy comparable to other RFRs is currently being prepared and will be implemented by Q4 2021.
 - SIX Financial Information AG is the Benchmark Administrator as per the EU Benchmark Regulation and SIX Financial Information Nordic AB its endorsing Entity in the EU.
- A representative from the Loan Market Association (LMA) briefed on their documentation developments, which include:
 - o the publication of recommended form rate switch and RFR agreements (previously in exposure draft form) in March 2021;
 - updates on recommended forms following EURIBOR fallback recommendations in May 2021;
 - o the release of compounded RFR investment grade and developing markets documentation; and
 - o an updated reference rate selection agreement for legacy deals in June 2021 (now published as a recommended form), noting that transition of legacy deals is becoming more important.

In respect of term rate documentation, there is an ongoing discussion with the export finance community regarding fallbacks to term rates. Also, the LMA is doing further work on education in respect of documentation and transition more generally (e.g. interview with Markus Bieri). As the most recent deals show, more loans are directly based on RFRs and not on a rate switch agreement, which is particularly the case for the UK market given end-Q1 milestones have passed. However, there appears to be some reluctance in the market to transition, particularly amongst some institutions in Europe and the US, given EURIBOR is continuing and clarification is awaited on a possible SOFR-based term rate. However, the LMA representative emphasized that the tools for transition are available now.

Members acknowledged that many participants of syndicated loans have repapered their syndicated loan contracts based on the <u>Rate Switch Amendment Agreement</u> presented at the 26th NWG meeting. However, not all market participants have taken the necessary steps, yet. One market participant mentioned that many banks are waiting for other banks to make the first step which delays market participants' transition. Another market participant added that this is the case in multi-currency syndicated loans as well as CHF bilateral contracts. Consequently, the NWG recommended that all Lead Arrangers of LIBOR-based syndicated

loans maturing after 2021 reach out to syndicate participants and borrowers as soon as possible to arrange the switch to an RFR. Likewise, the NWG recommended that all participants and borrowers in syndicated loans proactively contact the Lead Arrangers and request such a switch. One participant mentioned that the Sterling RFRWG is planning to send a note to UK market participants to encourage an active transition by highlighting the risks of leaving it pending until the last minute.¹

NWG members were informed about the expert opinion by Prof. Dr. Lukas Glanzmann regarding the legitimacy of non-cumulative compounded SARON under Swiss law. According to the expert opinion, the interest rate calculated by the method "cumulative compounding" yields the same interest rate as when calculated by the method "non-cumulative compounding". The sub-working group on syndicated loans, which is chaired by the private sector co-chair of the NWG, shares the view that the method "non-cumulative compounding" is a viable option. The expert opinion has already been published on the NWG webpage. One market participant added that it can be shown that the two formula reconcile.

4.2. Trade Finance

The meeting attendees were briefed on the work done by the working group on trade finance, which identified potential solutions for CHF discount products in case no forward-looking term rate is available. Therefore, the NWG recommended the use of either Last Recent SARON 1M Compound Rate or – e.g. for sophisticated institutions – Cost of Funds based upon the individual weighting of the need of a public benchmark vs. the need of perfect hedgeability. One market participant asked if there are any transparency issues when using Cost of Funds, in particular in a European context. The private sector co-chair answered that trade finance transactions were not under the BMR such that a non-BMR compliant rate can be used. However, the applicability would depend on national law. If retail customers (e.g. SME) are involved, then customer protection could be an issue. In contrast, if large and sophisticated market participants at arm's length are involved, transparency obligations should not be an issue.

4.3. Intercompany Loans

At the 26th meeting of the NWG, SARON 1M Compound Rate and using the option Last Recent was discussed for intercompany loans in CHF. Since then, an outreach to Swiss corporates has been conducted to review this proposal. Two key features were identified, which are relevant for intercompany loans. First, using a benchmark simplifies approval by tax authorities. Second, using a rate that is known at the beginning (i.e. in advance) matches existing methods. Based on the similar recommendation of the ARRC and in response to the NWG outreach, the NWG recommended to consider the option Last Recent and the SARON 1M Compound Rate for intercompany loans in CHF. One market participant asked whether

¹ The <u>document</u> has been published after the 27th meeting of the NWG.

this approach is recommended for intercompany loans in GBP as well. The LMA representative noted that there has not been a recommendation on intercompany loans in the UK yet. The chair of the L&D sub-working group added that a potential recommendation in the UK could be helpful in this regard.

5. SARON-based derivatives

5.1. Market developments

- The meeting participants acknowledged the final CHF ISDA fallback spread adjustments, which were published by Bloomberg. It was highlighted that the CHF ISDA spreads are very small compared to other currencies and since the spreads are now fixed, there remains no more price uncertainty. All in all, this should further promote the transition ahead of year-end 2021.
- The development of the SARON-based swap market over the last twelve months was discussed. As of May 2021, the estimated turnover in the CHF swap market was based to 60% on SARON. The relative amount has steadily increased over recent months and is expected to increase further, especially as one-off effects on LIBOR-based volumes attributed to the transition itself will vanish. Looking at SARON-based swaps only, more transactions with longer tenors were traded since the start of 2021.

5.2. Transition of CHF LIBOR-based swaps to SARON-based swaps

- An overview of key dates in the transition of cleared LIBOR swap contracts by LCH was given. Before the main LIBOR conversion, basis swap splitting will occur on 2 October 2021. Every basis swap will be split into two fixed/float swaps (still LIBOR-based) each with a fixed rate of 0% and for which no cash compensation is required (given the market risk continuity). If not subsequently compressed, these new swaps will then be part of the LIBOR conversion process on 4 December 2021 (18 December 2021 for GBP respectively), where LIBOR swaps will be terminated and re-booked as RFR swaps.² A key challenge is that all trades must be converted in a single coordinated event. An operational overlay is booked to account for representative LIBOR fixings until cessation (two fixed/float instruments each with 0% fixed rate). There will also be a cash compensation to account for small valuation differences between old LIBOR and new RFR swaps. The advantages of early conversion such as avoidance of fees were mentioned. One market participant asked when the overlay swaps were going to end. The LCH representative mentioned that such instruments will mature and roll off quickly, upon the expiry of the original LIBOR period (such as 3M or 6M) to which they relate.
- A representative from ICE gave an update on the transition of ICE LIBOR Futures. ICE recommends to transition ahead of time using the exchange's functionality of central order

 $^{^{2}}$ RFR swaps from the conversion differ slightly from standard RFR swaps, see presentation for details.

book, inter-contract spreads and/or asset allocations. Further, the representative informed that ICE will do a 1:1 transition of the remaining open positions on the weekend commencing 17 December 2021. The transition futures price will be anchored from the SARON futures daily settlement price and from there applying the three month CHF ISDA spread for final Euroswiss settlements.

- Members were informed about the transition plan for transactions referencing the CHF, GBP, JPY and USD LIBOR benchmarks by Eurex OTC Clear. In particular, Eurex Clearing plans to execute the conversion of trades referencing the CHF and JPY LIBOR starting on 3 December 2021 and of trades referencing the GBP LIBOR starting on 17 December 2021. Both conversions will be executed over the respective weekends. Details can be found in the Eurex Clearing Circular 022/21 and in the Eurex Clearing Circular 022/21 and in the Eurex Clearing. In case of further questions, market participants should reach out to Eurex Clearing.
- In addition to the above mentioned developments in the transition of CHF LIBOR swaps to SARON swaps, NWG members were reminded about the benefits of a transition ahead of end-2021. In light of this, the NWG repeated its recommendation to transition bilateral and cleared derivatives ahead of year-end 2021 (transition now) and reminded participants that fallbacks are just a "safety belt".

5.3. Start date(s) for using only SARON as price reference and benchmark in the derivative markets (SARON First)

- In order to promote a smooth transition to SARON in CHF derivative markets, the NWG recommended several start dates for using only SARON as single price reference and benchmark in derivative markets:
 - Ourrently, most CHF bonds are still priced on the basis of the CHF LIBOR swap curve, whereas the SARON swap curve is only used as an indication. The NWG recommended that all market participants (investors and issuers) switch to the SARON swap curve as the only pricing reference starting 1 September 2021, at the latest.
 - Members were informed about the "SONIA First" initiative in the UK as well as the "SOFR First" initiative in the US, with both initiatives encouraging a stepwise departure from using LIBOR in different market segments. In view of these initiatives and the FINMA Guidance 10/2020, the NWG recommended to use only SARON-based derivatives for new transactions starting from 1 July 2021, excluding transactions that reduce or hedge LIBOR exposures.
 - Members were briefed on the progress achieved in the cross-currency swap market, which is still largely based on LIBOR. The different national working groups are currently discussing 7 or 21 September 2021 as a possible start date to switch quoting conventions of cross-currency swaps in both LIBOR currency legs to RFR with the overall aim to make the switch simultaneously. Therefore, the NWG supported both dates, which are currently being discussed internationally 7 and 21 September 2021 as start dates to switch quoting conventions of cross-

currency swaps in all five LIBOR currencies to RFR (i.e. SOFR, SONIA, TONA, €STR and SARON). One market participant asked when EURIBOR/USD-LIBOR CCBS should be changed. The chair of the D&C sub-working group responded that there is no obligation to switch if you adhere to the fallback. A reasonable approach would be to restructure the deal ahead of time and at the earliest feasible date.

5.4. Further fallback guidance regarding the CHF LIBOR swap curve

- For CHF, there is no published benchmark for the LIBOR swap curve and therefore banks / calculation agents ask quotes from reference banks. Furthermore, the CHF LIBOR swap curve is indicatively used, e.g. for CHF hybrid bonds, where the NWG issued a recommendation at its meeting in February 2021. Apart from CHF hybrid bonds, the CHF LIBOR swap curve is also used in other products, e.g. swaptions. The NWG recommended for derivative products referencing the CHF LIBOR swap curve (e.g. swaptions) to use a similar formula as recommended for CHF hybrid bonds, but with additional technical adjustments.³
- A representative from the International Swaps and Derivatives Association (ISDA) gave an update on the publication of the 2021 ISDA Interest Rate Derivatives Definitions – published 11 June 2021:
 - The 2021 ISDA Definitions are the latest in a series of definitional booklets that provide the framework for documenting interest rate derivatives, last published in 2006 (the 2006 ISDA Definitions).
 - The 2021 ISDA Definitions are published in a purely digital format via ISDA's new interactive web-based user interface "MyLibrary".
 - The main areas of change in the 2021 ISDA Definitions compared to the 2006
 Definitions are as follows: Cash Settlement Methods, Floating Rate Options,
 Fallbacks, Business day/date conventions, Calculation Agent provisions.
 - The 2021 ISDA Definitions will be implemented by most major infrastructures on 4 October 2021 (such as LCH, CME, Eurex, MarkitWire etc).

Further information can be found on ISDA's website.

6. Further guidance on fallback languages

• Members discussed the <u>support</u> expressed by the Financial Stability Board to use the ISDA spread adjustments in cash products. The NWG already recommended to use the ISDA spread adjustments for specific products. At its 27th meeting, *the NWG recommended using compounded SARON and, in case a spread adjustment is applied, CHF ISDA spreads as a*

³ Formula can be found in the presentation.

- reference point for a fallback rate for CHF LIBOR for all kind of products if no other fallback rate is specified.
- As a last item, a possible in-advance fallback methodology for CHF LIBOR was discussed. In this context, the European Commission started a consultation on the suitability of designating a statutory replacement rate for CHF 3M LIBOR in mortgages and small business loans concluded prior to the entry into application of the EU Benchmark Regulation and governed by the laws of one of the EU Member States. The consultation proposed the SARON Compound Rates and the CHF LIBOR ISDA spreads as fallback rate for CHF LIBOR and to use the option Last Reset. The consultation outcome indicates that there is a need to also designate a statutory replacement rate for longer tenors. The responses indicate that the option Last Recent is more reasonable than the option Last Reset. In case the fallback rate needs to be known in advance and no other fallback rate is specified, the NWG recommended to consider the option Last Recent and the SARON IM Compound Rate for compounded SARON in the fallback methodology. Hence, e.g. for a fallback rate for CHF 6M LIBOR, the recommendation if no other fallback rate is specified and the fallback rate needs to be known in advance is to consider SARON IM Compound Rate in advance and the CHF 6M ISDA spread as a fallback rate for CHF 6M LIBOR.

7. Recommendations

- On its 27th meeting, the NWG recommended:
 - o to also consider the option Last Recent and the SARON 1M Compound Rate as an option for using the SARON Compound Rate.
 - o that all Lead Arrangers of LIBOR-based syndicated loans maturing after 2021 reach out to syndicate participants and borrowers as soon as possible to arrange the switch to a RFR. Likewise, all participants and borrowers in syndicated loans should proactively contact the Lead Arrangers and request such a switch.
 - the use of either Last Recent SARON 1M Compound Rate or e.g. for sophisticated institutions – Cost of Funds based upon the individual weighting of the need of a public benchmark vs. the need of hedgeability on trade finance in CHF.
 - to consider the option Last Recent and the SARON 1M Compound Rate for intercompany loans in CHF.
 - o that all market participants (investors and issuers) switch to the SARON swap curve as the only pricing reference starting 1 September 2021, at the latest.
 - o to use only SARON-based derivatives for new transactions starting from 1 July 2021, excluding transactions that reduce or hedge LIBOR exposures.
 - o for derivative products referencing the CHF LIBOR swap curve (e.g. swaptions) to use a similar formula as recommended for CHF hybrid bonds, but with

- additional technical adjustments (see formula in analogy to the technical recommendation of UK RFR WG).
- using compounded SARON and, in case a spread adjustment is applied, CHF
 ISDA spreads as a reference point for a fallback rate for CHF LIBOR for all kind of products if no other fallback rate is specified.
- o in case the fallback rate needs to be known in advance and no other fallback rate is specified, to consider the option Last Recent and the SARON 1M Compound Rate for compounded SARON in the fallback methodology. Hence, e.g. for a fallback rate for CHF 6M LIBOR, the recommendation if no other fallback rate is specified and the fallback rate needs to be known in advance is to consider SARON 1M Compound Rate in advance and the CHF 6M ISDA spread as a fallback rate for CHF 6M LIBOR.
- Furthermore, the NWG supports both dates, which are currently being discussed internationally − 7 and 21 September 2021 − as start dates to switch quoting conventions of cross-currency swaps in all five LIBOR currencies to RFR (i.e. SOFR, SONIA, TONA, €STR and SARON). Also, the NWG repeated its recommendation to transition bilateral and cleared derivatives ahead of end-2021 (transition now). ISDA fallbacks are just a "safety belt".
- Finally, a survey among NWG members ahead of the 27th meeting showed that a vast majority thinks that there are no material unaddressed topics by the NWG in the transition away from LIBOR. However, members would like to continue to be informed about relevant news in the context of the transition.

8. Next steps

- The NWG and its sub-working groups will continue to:
 - 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.
 - 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 3 November 2021, 15:00 17:00 (CET). Note that the NWG meeting has been moved to 9 November 2021, 15:00 17:00 (CET).
- Before closing the meeting, the official sector co-chair of the NWG bid farewell to Basil Guggenheim and thanked him for his contributions. On a regular basis, Basil presented content at the NWG meetings and was highly engaged in the sub-working groups and in the NWG Secretariat work over many years. As of today, he will leave these NWG-related functions as he assumes a new role at the SNB. The co-chair wished him all the best for all future endeavours.

Attendance at the 1 July 2021 meeting

Martin Bardenhewer – Zürcher Kantonalbank, co-chair

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

Carlo Acerbi – Banque Pictet & Cie. SA Kpate Adjaouté – HSBC PB (Suisse)

Uriel Amitai – ICE Christian Bahr – SIX

Ismail Balma – Société Générale SA

Roger Baumeler – LUKB Maesa Beany – Eurex

Markus Bieri – SwissACT/LafargeHolcim Mathieu Casadevall – Société Générale SA Zoran Celeketic – UniCredit SpA

Thies Claassen – SIX

Alberto Covin – UniCredit SpA
Thomas Damagnez – CA Indosuez
Guillermo De La Fuente – ACTSR/SITA

Michel Erni – BKB Nina Fraefel – SBA Fernando Gardoni – SGKB

Christian Gerber – AXA Versicherungen AG

Raffael Goldenberger **Entris** Thomas Graf Valiant Stéphane Hegi **BCV** Valère Henrotte Leonteq Stefan Hoeferlin Eurofima Jenny Ivleva Eurex **ICMA** Katy Kelly Thomas Kolb **SBB** Rolf Konrad **BKB**

Soeren Kretschmar – Deutsche Bank

Marcus Kriendlhofer – UniCredit Bank Austria

Sebastiaan Michel Krist – Raiffeisen Doug Laurie – Barclays

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

Nicolas Lergier – GKB
Ernst Lienhard – SwissRe
Kam Mahil – LMA
Bruno Marin – BNP
Chantal Markey – UBS
Cédric Martin – Leonteq
Jonathan Martin – ISDA

Jürgen Maurer – Erste Group Bank AG

Elizabeth McGowan – Wells Fargo

Neil McLeod – Erste Group Bank AG

Christopher Meadowcroft – Credit Suisse Claudio Menghi – Nestlé Rolf Meyer – Bank CIC (Schweiz) AG

Paolo Monticolo – Zurich Insurance Claus Neumeier – SwissLife Alexander Ocker – Raiffeisen

Franck Paniandy – ACTSR/Maus Frères S.A.

Jacques Piasko–Julius BärStefan M. Pomberger–VontobelThomas Miguel Reeg–J. Safra Sarasin

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

Henning Sandrowski – UniCredit SpA

Christophe Schaer – Union Bancaire Privée

Daniel Schenker – ZKB
Beat Schlegel – Clientis
Christof Schlenk – BKB
Philipp Schmid – SIX

Sandro Schmid – Swiss Risk Association/AAAccell

Roland Schwab – Postfinance René Schwyzer – LGT

Kevin Sibold – Credit Suisse
Roland Studer – Credit Suisse
Andrea Surro – EFG Bank

Isabelle Sutter – Bank CIC (Schweiz) AG

Alexandre Tamisier – Leonteq
Pierre-Henri Turc – BCGE
Philip Whitehurst – LCH

Christian Capuano – Swiss Financial Market Supervisory Authority (FINMA)

Roman Baumann – Swiss National Bank, official sector representative

Luca Freiermuth – Swiss National Bank, official sector representative

Lucas Fuhrer – Swiss National Bank, official sector representative

Oliver Gloede – Swiss National Bank, official sector representative

Basil Guggenheim – Swiss National Bank, official sector representative

National Working Group on CHF Reference Rates

27th Meeting, 1 July 2021

All slides are confidential until publication, which will be done in due course on the NWG website.

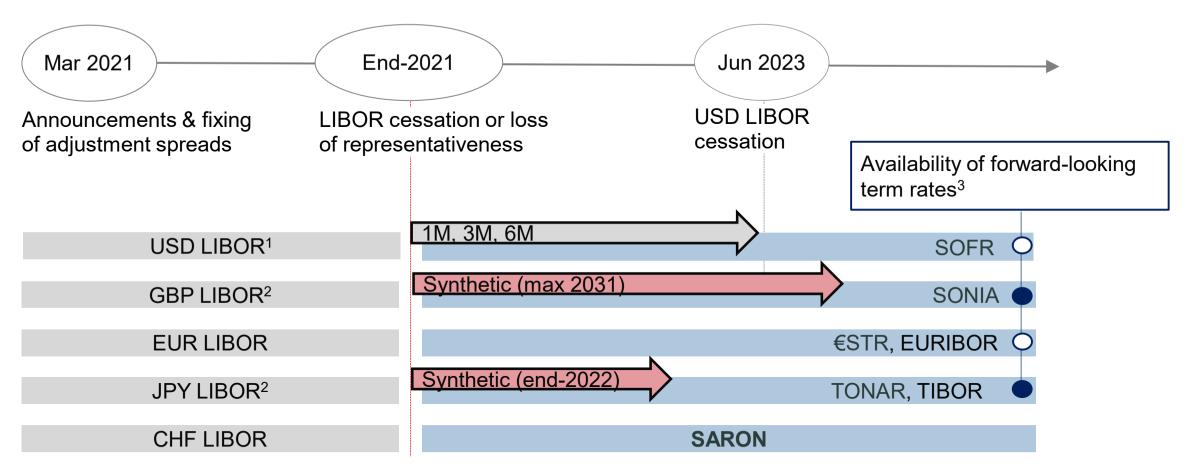
Agenda

- 1. Opening remarks
- 2. End of LIBOR Announcements by IBA and FCA
- 3. Update by FINMA
- 4. SARON-based cash products
 - a) Market developments
 - b) Trade finance
 - c) Intercompany loans
- SARON-based derivatives
 - a) Market developments
 - b) Transition of CHF LIBOR-based swaps to SARON-based swaps
 - c) Start date(s) for using only SARON as price reference and benchmark in the derivative markets (SARON First)
 - d) Further fallback guidance regarding the CHF LIBOR Swap curve
- 6. Further guidance on fallback languages
- 7. Recommendations and next steps

1. Opening remarks

2. End of LIBOR – Announcements by IBA and FCA

The endgame of LIBOR is final



¹ Cessation as of end-2021 only includes USD LIBOR 1W & 2M; remaining USD LIBOR settings should only be used in legacy contracts/ not for new business. A synthetic USD LIBOR is rather unlikely (see speech by Randal K. Quarles, board member of the Fed). "The Secured Overnight Financing Rate (SOFR), which is based on a nearly trillion-dollar market, is a preferable alternative rate." (see speech by Gary Gensler, Chair of SEC)

² Synthetic LIBOR can only be used in legacy contracts / not for new business.

^{3 &}quot;Broad-based transition to the most robust overnight rates, underpinned by deep underlying markets, will support a stronger more transparent financial system and ultimately benefit all market participants." (see speech by Andrew Bailey, Governor BoE).

Overview on (forward-looking) term rates (based on RFR-derivatives)

GBP: SONIA term rate

- Official SONIA term rates: Refinitiv and IBA launched on 11 January 2021 their Term SONIA Reference Rates (both for 1M, 3M, 6M and 12M).
- The rates are administered by Refinitiv Benchmark Services Limited (RBSL) and ICE Benchmark Administration in compliance with UK Benchmarks Regulation (BMR).
- Ideally, term rates are only used for certain cases (<u>usage of the term rate</u> cannot be restricted under UK BMR; the usage of the synthetic rate is restricted to tough legacies).
- "Broad-based transition to the most robust overnight rates, underpinned by deep underlying markets, will support a stronger more transparent financial system and ultimately benefit all market participants." (see speech by Andrew Bailey, Governor BoE).

USD: SOFR term rate

- ARRC selected CME as administrator, but has not yet formally recommended a SOFR term rate.
- ARRC welcomed MRAC subcommittee's recommended dates for transitioning interdealer swap market trading conventions to SOFR on 26 July 2021. This reflects a further step in recommending a SOFR term rate based on the ARRC's defined indicators.
- CME publishes a BMR and IOSCO compliant SOFR term rate, which can be used in cash products until 30 June 2023. Any usage thereafter will be communicated.

EUR: €STR term rate

An €STR term rate is not yet available, although potential administrators are working on term rates.

JPY: Tokyo Term Risk Free Rate (TORF)

QUICK Benchmarks Inc. began <u>publishing</u> production term reference rates on 26 April 2021. The rates can be used in actual transactions and the tenors are 1M, 3M and 6M. The main purpose is for cash products. However, TORF can also be used for derivatives (item 2 in <u>appendix</u>).

CHF: SARON term rate not recommended and not expected.

FINMA <u>Guidance</u> 10/2020 – LIBOR transition roadmap see also FSB roadmap

By 25 January 2021

Signing of ISDA 2020 IBOR
 Fallbacks Protocol*

By 31 January 2021

- No new "tough legacy"
- Readiness to grant loans based on risk free rates (RFR)

By 31 March 2021

 Plans for the reduction of "tough legacy"

By 30 June 2021

- System and process changes implemented
- Mitigation of risks for remaining "tough legacy"
- New contracts in general based on RFR

By 31 December 2021

- Full operational readiness
- All new contracts based on RFR

31 December 2021: discontinuation of LIBOR**

^{*} According to Guidance 08/2020: LIBOR replacement for derivatives

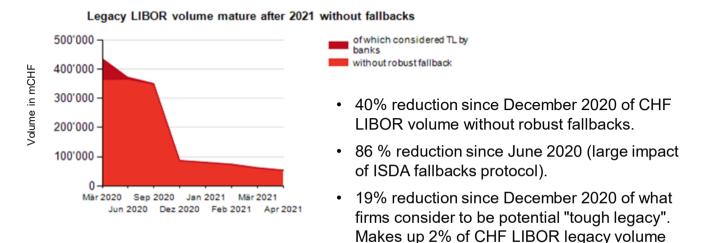
^{**} Except for individual tenors of USD LIBOR that continue to be available until the end of June 2023

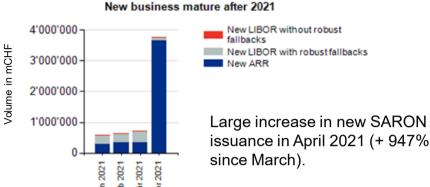
3. Update by FINMA

Satisfactory progress overall, but with individual outliers lagging behind

- In 2021, FINMA is monitoring the progress of the LIBOR transition through a monthly self-assessment of the 20 most heavily impacted banks and securities firms. FINMA is tracking adherence to the milestones communicated in the FINMA Guidance 10/2020 LIBOR transition roadmap, across all currencies
- The large majority of monitored firms (>75%) is currently on track, with only a few outliers lagging behind in certain aspects of the transition such as operational readiness, proactive outreach to counterparties (in particular for syndicated loans) or stopping entering into new LIBOR contracts. Outliers have been contacted and additional supervisory measures are being evaluated for these firms in case expectations of the FINMA Guidance 10/2020 are not met.
- Operational readiness as at 30 April 2021: 75% of firms have already fully adapted more than 50% of their systems affected by the LIBOR transition; 40% of firms have fully adapted more than 75% of their systems.
- Positive trends for the transition from CHF LIBOR to SARON (aggregated view of all product types, as per 30 April 2021):

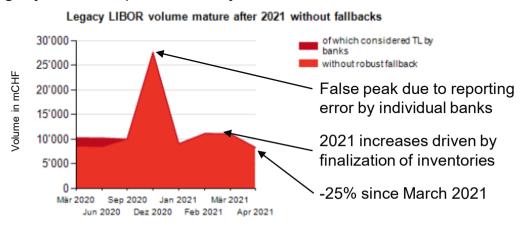
and mostly relates to OTC derivatives.



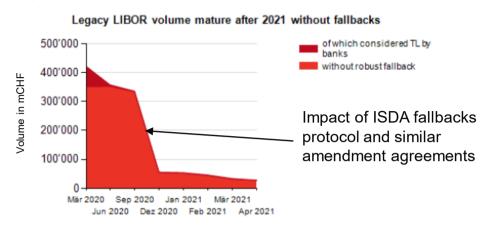


Transition from CHF LIBOR to SARON - Overview per key product types (30 April 2021)

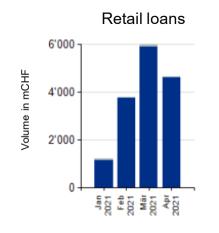
Legacy retail, corporate and syndicated loans:

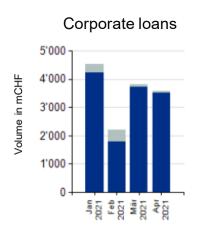


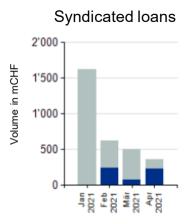
Legacy OTC derivatives:

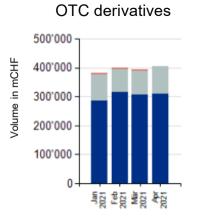


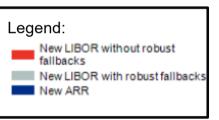
New business mature after 2021:











Treatment of USD LIBOR

- The FINMA Guidance 10/2020 recommends that new contracts should:
 - From 31 January 2021 onwards include robust fallback clauses. This milestone should be adhered to wherever possible also for the USD LIBOR
 - o From **30 June 2021** onwards generally be based on alternative reference rates (ARR): this means LIBOR should no longer be used except for strictly limited, justified and documented exceptions. **This milestone also applies to the USD LIBOR.**
 - o From 31 December 2021 onwards only be based on ARR. This milestone also applies to the USD LIBOR.
- In this context, FINMA again highlights the joint FRB, FDIC and OCC statement of 30 November 2020, in particular:
 - [...] the agencies encourage banks to **cease entering into new contracts that use USD LIBOR** as a reference rate **as soon as practicable and in any event by December 31, 2021**. New contracts entered into before December 31, 2021 should either utilize a reference rate other than LIBOR or have **robust fallback language** that includes a clearly defined alternative reference rate after LIBOR's discontinuation.
- Through footnotes 13 and 7 of FINMA Guidance 10/2020 (i.e. through the joint FRB, FDIC and OCC <u>statement</u> of 30 November 2020), FINMA recognizes possible exceptions to the milestones in the area of USD LIBOR:
 - If the administrator of LIBOR extends the publication of USD LIBOR beyond December 31, 2021, the agencies recognize that there may be limited circumstances when it would be appropriate for a bank to enter into new USD LIBOR contracts after December 31, 2021, such as: (i) transactions executed for purposes of required participation in a central counterparty auction procedure in the case of a member default, including transactions to hedge the resulting USD LIBOR exposure; (ii) market making in support of client activity related to USD LIBOR transactions executed before January 1, 2022; (iii) transactions that reduce or hedge the bank's or any client of the bank's USD LIBOR exposure on contracts entered into before January 1, 2022; and (iv) novations of USD LIBOR transactions executed before January 1, 2022.
- For those USD products that fall under at least one of the above exceptions (i)-(iv), an exception to the FINMA Guidance 10/2020 roadmap is appropriate.

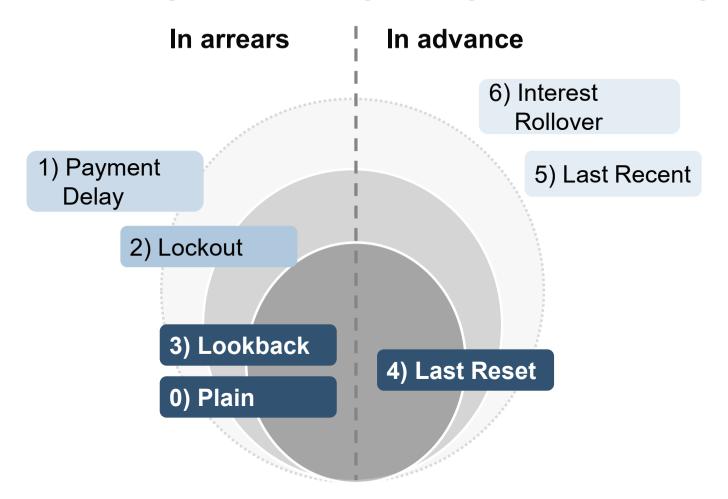
4. SARON-based cash products

Topics

a) Market developments

- -SARON cash market
- Update by SIX Financial Information AG
- Update by LMA
- -Legitimacy of non-cumulative compounded SARON under Swiss law
- Trade finance
- Intercompany loans

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

This list was created based on available information. The list is not necessarily complete.

0) Plain

- Alpha Rheintal Bank
- Banca dello Stato del Cantone Ticino
- Bank Cler
- Basler KB
- CS
- Hypothekarbank Lenzburg
- Raiffeisen
- Thurgauer KB
- **UBS**

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3) Lookback, with an observation shift of 2 – 7 days

- Aargauische KB
- Acrevis
- Baloise Bank
- Bank Avera
- Bank BSU
- Bank CIC
- Bank Gantrisch
- Bank Linth
- Bank SLM
- Basellandschaftliche KB
- Clientis
- Crédit Agricole next bank
- Glarner KB
- Graubündner KB
- Liechtensteinische LB

- Luzerner KR
- Migros Bank
- Nidwaldner KB
- Obwaldner KB
- Postfinance
- Schaffhauser KB
- Schwyzer KB
- Sparkasse Schwyz
- Spar und Leihkasse Gürbetal
- St. Galler KB
- Urner KB
- Valiant
- Vontobel
- Zuger KB
- Zürcher KB

4) Last Reset

- Appenzeller KB
- Bank CIC
- Bank Linth
- Berner KB
- CS
- DC Bank
- Liechtensteinische LB
- Regiobank Solothurn
- Spar- und Leihkasse Bucheggberg AG
- **WIR Bank**

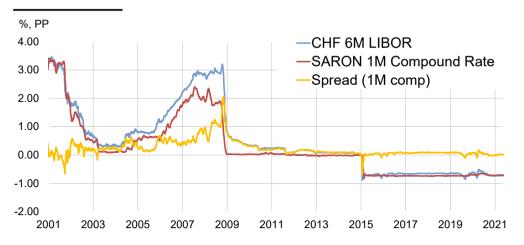
Behaviour of compounded in-advance rates

Main points

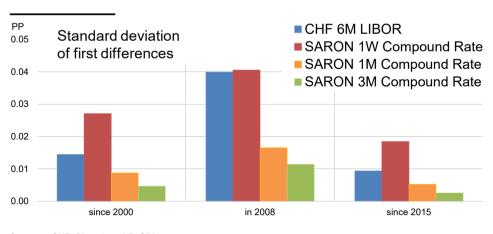
 Historical spreads between in-advance compounded SARON and LIBOR (as a forward-looking rate) are very small in a stable interest rate environment.

The shorter the observation period, the faster compounded SARON **adjusts** to a new interest rate environment.

- 2. Volatility of compounded SARON is slightly higher for a one month observation period than for three months but significantly lower than for one week.
- → A one month observation period seems appropriate, since it provides a good balance between adaptability and volatility.
- 3. Furthermore, using the pre-calculated rate provided by SIX Financial Information AG (SARON 1M Compound Rate) instead of applying the compound formula is beneficial, as a published rate is easier to communicate.



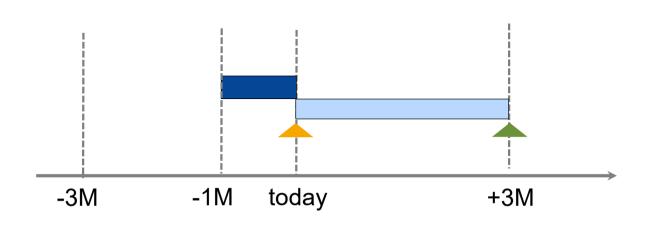
Sources: SNB, Bloomberg LP, SIX

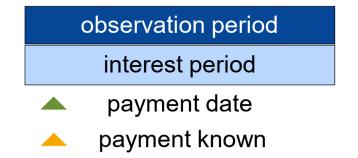


Sources: SNB, Bloomberg LP, SIX

Last Recent SARON 1M Compound Rate is a reasonable option for a compounded SARON in-advance rate.

Deep Dive: Option Last Recent and the SARON 1M Compound Rate

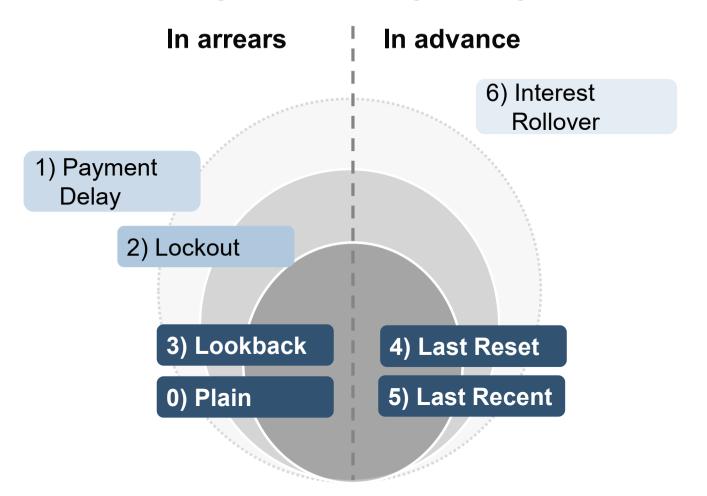




Features:

- By using the option Last Recent the rate is known at the beginning of an interest period.
- SARON 1M Compound Rate is provided by an official source (i.e. its administrator SIX Financial Information AG).
- SARON 1M Compound Rate adjusts faster to interest rate changes than e.g. SARON 3M Compound Rate.
- Shortening the observation period has a limited impact on the interest payment, as SARON Compound Rates are "per annum". For the calculation of the interest payment, the "per annum" rate is applied on the number of days in the interest period.

Update on guidance regarding options using compounded SARON



- Discussions on national and international level on loan options is currently centered around options 0), 3), 4) and recently also 5)
- Preference varies according to client segments and currencies
- For a detailed assessment please also see the <u>NWG Slides</u> from February 2019

The NWG recommends to also consider the option Last Recent and the SARON 1M Compound Rate.

Update by SIX Financial Information AG

- Rulebook newly includes formula for lag and shift calculations
- Further tenors for SARON Compound Rates/Indices have been published
 - 1w, 1m, 2m, 3m, 6m, 9m and 12m are now available
- For illustrative purposes, SARON Compound Rates/Indices (lagged by one day) are available without a license on the <u>webpage</u>
- SIX Financial Information AG is currently working on a Correction/Republication policy comparable to other RFRs (Thresholds, correction window, etc.) and will implement it by Q4
- SIX Financial Information AG is the Benchmark Administrator as per the EU BMR and SIX
 Financial Information Nordic AB its endorsing Entity in the EU

LMA update – LMA documentation developments

Exposure draft rate switch and RFR agreements were published as recommended forms in March 2021 (and new single currency agreements) following £WG updates

Recommended forms further updated in May for EURIBOR fallback recommendations

LMA work on RFR documentation suite Release in May of RFR suite of investment grade documents and compounded RFR developing markets document; drafting guide published for rest of the suite

Reference rate selection agreement for legacy deals updated in June and published as recommended form (can be used with switch or day one RFR agreements)

Considerations around use of / alternatives to term rates – ongoing discussions with export finance community

Work on further documentation and education on transition more generally (e.g. interview with Markus Bieri)

LMA update – selection of compounded RFR loans in practice

Date	Borrower	Amount / Tenor	Lender(s)	RFR construction	Observation shift	Interest periods	Other useful information
June 2021	Grain Service LLC	US\$12m (18 months)	Sberbank	Compounded in arrears; 5 business day lookback	No		First SOFR-linked commercial loan in Russia
April 2021	Ethypharm	£245m TLB					First SONIA leveraged loan
April 2021	Wickes Group Plc	£80m (3+1+1 years)	4 bank club	Compounded in arrears; lookback			Compounded SONIA & SOFR, EURIBOR
April 2021	Iberdrola	€2.5bn (5 years)	21 bank syndicate				Compounded SONIA & SOFR, EURIBOR
April 2021	Clarion Housing Group	£100m (10 years)	NatWest	Compounded in arrears; 5 banking days lookback (using non-cumulative rate)	No	1, 3 and 6 months	No credit adjustment spread
March 2021	Indian Oil Corporation Ltd	US\$100m (5 years)	State Bank of India				First SOFR-linked corporate loan in India
March 2021	The Guinness Partnership Limited	£150m (5 years)	Lloyds	Compounded in arrears; 5 banking days lookback (using non-cumulative rate)	No	1, 3 and 6 months	Credit adjustment spread based on ISDA approach
March 2021	Cross Keys Homes	£50m (4 years)	NatWest	Compounded in arrears; 5 business days lookback (using non-cumulative rate)	No	3 or 6 months	No credit adjustment spread
March 2021	Implenia AG	CHF650m (3 years)	18 bank syndicate	Compounded in arrears; 5 business days lookback	Yes	1, 3 and 6 months	Credit adjustment spread fixed at outset
Feb 2021	Swisscom AG	CHF1.2bn (5 years)	24 bank syndicate	Compounded in arrears; 5 banking days lookback	Yes	1, 3 and 6 months	
Jan 2021	ICG	£550m (3 years)	12 bank syndicate	Compounded in arrears; 5 banking days lookback (using non-cumulative rate)	No	1 and 3 months	Credit adjustment spread fixed at outset

Update on syndicated loans

Background

- Syndicated loans based on LIBOR are currently repapered in order to allow a switch to a RFR.
- LMA has drafted agreements which can be used to transition from IBOR- to RFR-based credit agreements.
- The NWG published a «Rate Switch Amendment Agreement», which is a simplified version with the aim to have a standardized credit amendment agreement for CHF single currency credit facility/-ies agreement in English language governed by Swiss law.
- The «Rate Switch Amendment Agreement» is based on the recommended standard for the Swiss market (i.e.
 Lookback with observation shift and lag as alternative, compounded SARON, and a floor for compounded SARON,
 if a floor is included). See also the appendix for some further conventions for SARON-based syndicated loans.
- Many, but not all participants of syndicated loans currently have repapered their syndicated loan contracts.
- In the UK, a <u>dear CEO Letter</u> was sent as the progress in the sterling syndicated lending business away from LIBOR has lagged other segments of the cash markets.

The NWG recommends that all Lead Arrangers of LIBOR-based syndicated loans maturing after 2021 reach out to syndicate participants and borrowers as soon as possible to arrange the switch to a RFR. Likewise, the NWG recommends that all participants and borrowers in syndicated loans proactively contact the Lead Arrangers and request such a switch.

Expert opinion on the legitimacy of non-cumulative compounded SARON under Swiss law

Background

- Non-cumulative compounded RFR is the standard in international markets.
- In the domestic market cumulative compounded SARON is the standard.
- Due to the international setup of syndicated loans, the legitimacy of non-cumulative compounded SARON under Swiss law was discussed.

Work done since the last NWG meeting

- A second expert opinion by Prof. Dr. Lukas Glanzmann was written, providing his answers on the permissibility of using non-cumulative compounded SARON under Swiss law.
- The interest rate by using the method "cumulative" compounding yields the same interest rate as by using the method "non-cumulative" compounding.
- The method "non-cumulative" compounding is easier to implement in operational terms if the nominal changes during the interest period.
- The sub-working group on syndicated loans, which is chaired by the private sector co-chair of the NWG,
 shares the view that the method "non-cumulative" compounding is a viable option.
- The expert opinion was <u>published</u> on the NWG webpage.

Topics

- a) Market developments
 - -SARON cash market
 - Update by SIX Financial Information AG
 - Update by LMA
 - -Legitimacy of non-cumulative compounded SARON under Swiss law

b) Trade finance

c) Intercompany loans

CHF Discount Products in case no forward-looking term rate is available

Challenge

- Certain products («discount products») require a rate, which is known at the beginning, but not necessarily forward-looking (see also a paper by the UK RFR WG on use cases).
- Discount products are used e.g. in trade finance.
- For CHF, a forward-looking term rate is not recommended and not expected.

Work done since the last NWG meeting

- A working group with focus on trade finance has continued to discuss potential solutions.
- Two potential solutions have been identified:
 - 1. SARON Compound Rates used "in advance". This rate is published by SIX Financial Information AG for several tenors and known at the start of an interest period, as long as it is used "in advance". The rate, however, is not forward-looking.
 - 2. Internal cost of funds rate. This rate is forward-looking and based on the funding costs of the individual bank. These rates are usually not published and are not recognized as a benchmark under the (UK / EU) BMR. However, such a rate could be used, as it is not in the scope of the BMR.

Recommendation on trade finance in CHF

Last Recent SARON 1M Compound Rate	Cost of Funds
Known in advance	Known in advance
 Eligible benchmark under BMR (i.e. can be used in any use case) 	 Not covered by BMR (i.e. can be used if not published as an index)
 Pricing components are fully transparent (public benchmark + spread) 	 Forward-looking, based upon a non-published methodology
 Perfect hedge not possible (residual risk potentially small) 	Potentially a perfect hedge
 This option is also proposed today for intercompany loans in CHF and a similar version is <u>recommended by the ARRC</u>. 	Comparable to pricing of a fixed advance

The NWG recommends the use of either Last Recent SARON 1M Compound Rate or – e.g. for sophisticated institutions – Cost of Funds based upon the individual weighting of the need of a public benchmark vs. the need of hedgeability.

Topics

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Intercompany loans – background and key features identified

Background

- So far, LIBOR and other IBORs are used for intercompany loans. Intercompany loans are used by corporates to finance other group companies, which can be located in different jurisdictions.
- Using a fixed rate, known at the beginning of the interest period, is the current standard.
- At the last meeting of the NWG, SARON 1M Compound Rate and using the option Last Recent was discussed for intercompany loans in CHF.
- Since then, an outreach to Swiss corporates was conducted to review this proposal.
- Two key features were identified, which are relevant for intercompany loans.

First key feature identified: Using a benchmark

- LIBOR is a benchmark, i.e. there is an official fixing every (London business) day.
- Using a benchmark simplifies the approval by tax authorities.

Second key feature identified: Using a rate, which is known at the beginning (i.e. in advance)

– LIBOR has also the advantage that the rate is known at the beginning of the interest period (i.e. in advance). As this is the standard so far, changing the interest calculation to compounding in arrears, where interest rate and amount is only known at the end of the interest period, can be challenging. This is especially the case in some jurisdictions where there is no focus on using ON rates.

Recommendation by the US working group on intercompany loans (Alternative Reference Rate Committee, ARRC)

- <u>ARRC recommended</u> to use the 30 or 90-day SOFR Averages as published by the Federal Reserve Bank of New York for intercompany loans, e.g. with non-financial corporates. Furthermore, the recommendation states that this 30 or 90-day SOFR can be used at the beginning of the interest period (in advance) for an intercompany loan <u>of any period length</u> (e.g. a one-year intercompany loan).
- Hence, the ARRC recommends to use the option Last Recent, where the rate is known at the beginning (in advance) and can be applied to any period length.
- Further information and data on SOFR Averages can be found on the <u>webpage</u> of its administrator, the NY Fed.

Proposed solution at the last NWG meeting

Possible solution: SARON 1M Compound Rate

- SARON 1M Compound Rate is the Swiss equivalent to the 30-day SOFR Average.
- SARON 1M Compound Rate is provided by SIX Financial Information AG on every business day.
- Using a benchmark (e.g. SARON 1M Compound Rate) reduces complexity (no calculation required by users) and legal uncertainty (official source).
- SARON 1M Compound Rate could be applied for all intercompany loans of any maturity.
- SARON 1M Compound Rate adjusts faster to interest rate changes than the SARON 3M Compound Rate, as the observation period is only one month.
- Recommending a single rate (i.e. only the 1M rate and not also the 3M rate) makes it easier to justify the rate to tax authorities.

Further information on the SARON Compound Rates can be found on the <u>webpage</u> of its administrator (SIX Financial Information AG) and in the <u>rulebook</u> [chapter 5], which describes the methodology of SARON and the SARON Compound Rates.

Historic values of the SARON Compound Rates can be downloaded from the SIX <u>webpage</u>. Fixings with a lag of three business days can be accessed for illustrative purposes without a license.

Outreach on intercompany loans (I)

Outreach to stakeholder

- An outreach to a large group of non-financial corporates was conducted in March 2021.
- The outreach included a survey.
- Additionally, a webinar was conducted in order to support the outreach.

Findings based on the outreach

- Question 1: In case SARON 1M Compound Rate would be available and accepted by local tax authorities, would you consider to use this rate for intercompany loans in CHF? → mostly «yes»
- Question 2: In Switzerland, future loans will be based on compounded SARON in arrears. Are there any issues to use the SARON 1M Compound rate in advance (Last Recent) for intercompany loans in CHF?
 → mostly "no issues"
- Question 3: What is the preferred option in case the intercompany loan is based on compounded SARON? → mostly Last Recent; minority replied Last Reset or Lookback
- Question 4: After the cessation of LIBOR, what are your main challenges entering into new intercompany loans based on risk-free rates? → technical issues in case of in-arrears solutions; hedging and pricing of FX Swaps

Outreach on intercompany loans (II)

Findings based on the outreach (continued)

- Question 5: Do you consider having a fallback language in your intercompany loan contracts and how should the fallback rate be designed? → Mostly "no"; some replied that remaining contracts will rather be renegotiated; some replied to favor ISDA spreads for fallback calculations
- Question 6: Any other remarks? → Mostly "no"; some replied that in arrears is not feasible

Conclusion

SARON 1M Compound Rate and the option Last Recent is preferred by most stakeholders.

The NWG recommends to consider the option Last Recent and the SARON 1M Compound Rate for intercompany loans in CHF.

5. SARON-based derivatives

Topics

a) Market developments

- Overview of the derivative market
- b) Transition of CHF LIBOR-based swaps to SARON-based swaps
 - Transition of cleared LIBOR swap contracts by LCH
 - Transition of ICE LIBOR Futures
 - Recommendation to transition ahead of end-2021
- c) Start date(s) for using only SARON as price reference and benchmark in the derivative markets (SARON First)
 - SARON swap curve as new price reference for bonds
 - SARON conventions in derivatives (e.g. swaps, swaptions)
 - Start date for RFR CCBS
- d) Further fallback guidance regarding the CHF LIBOR swap curve

Source: Bloomberg LP, Ticker FBAK

Final CHF ISDA fallback spreads

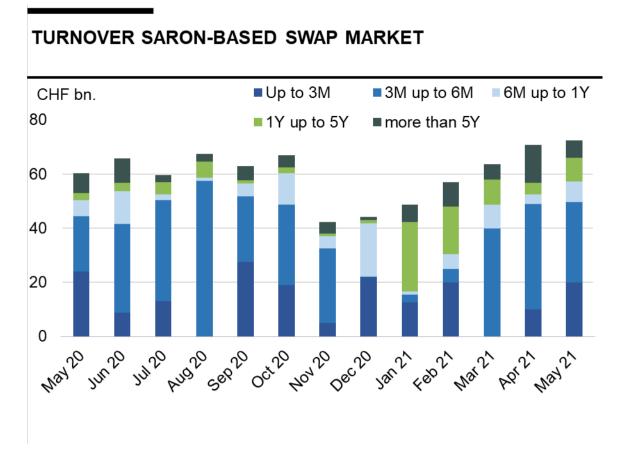
published by Bloomberg

Tenor	Ticker	Spread Adjustment in PP
Spot / Next	SSF00SN Index	-0.0551
1 Week	SSF0001W Index	-0.0705
1 Month	SSF0001M Index	-0.0571
2 Months	SSF0002M Index	-0.0231
3 Months	SSF0003M Index	0.0031
6 Months	SSF0006M Index	0.0741
12 Months	SSF0012M Index	0.2048

Main points

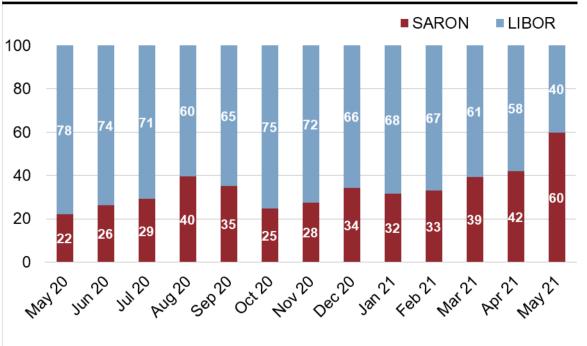
- 1. CHF ISDA fallback spreads are very small.
- 2. As the spreads are fixed, there is no more price uncertainty.
- → This should further facilitate a transition ahead of end-2021.

Current development of the SARON-based swap market





Relative share of total turnover per month in percent



-> LIBOR-based interest rate swaps include all swaps irrespective of their purpose. Hence, LIBOR-based transactions which are conducted to reduce existing LIBOR swap exposures are not excluded and may overestimate the actual share of new LIBOR-based transactions.

Topics

- a) Market developments
 - Overview of the derivative market
- b) Transition of CHF LIBOR-based swaps to SARON-based swaps
 - Transition of cleared LIBOR swap contracts by LCH
 - Transition of ICE LIBOR Futures
 - Recommendation to transition ahead of end-2021
- c) Start date(s) for using only SARON as price reference and benchmark in the derivative markets (SARON First)
 - SARON swap curve as new price reference for bonds
 - SARON conventions in derivatives (e.g. swaps, swaptions)
 - Start date for RFR CCBS
- d) Further fallback guidance regarding the CHF LIBOR swap curve

Transition of cleared LIBOR swap contracts by LCH – overview

Key dates for LIBOR conversion

August 2021: LIBOR conversion tools and reports available

Weekend of 2.10.21: Basis swap splitting (dress rehearsal on 11.9.)

Weekend of 4.12.21: CHF, EUR, JPY LIBOR to RFR conversion (rehearsals 25.9. and 13.11.)

Weekend of 18.12.21: GBP LIBOR to RFR conversion (rehearsals 25.9. and 13.11.)

Basis swap splitting (2nd October)

- Basis swaps will not be settled via cash compensation
- Instead, every basis swap will be split into two fixed/float swaps each with fixed rate = 0%
- These new fixed/float swaps will then be part of the conversion process on 4th December (or 18th Dec for GBP respectively)

LIBOR conversion (4th December)

- Conversion of LIBOR swaps to RFR swaps
- Operational overlay to account for representative fixings until cessation (this will be booked as two fixed/float instruments each with 0% fixed rate)
- There will be a cash compensation to account for small valuation differences between old (LIBOR) and new (RFR + Spread) swaps

Transition of cleared LIBOR swap contracts by LCH – details

LIBOR conversion

- Old LIBOR swaps will be terminated and re-booked as RFR swaps
- Fixed leg remains unchanged (including payment dates!)
- LIBOR leg will be converted to **standard** RFR + spread (i.e. no two day observation period shift as in the case for ISDA fallback swaps)
- Thus, there will be a payment offset between the fixed leg and the new RFR leg in CHF
- LIBOR is still representative until 31.12.21; thus there could be valid future LIBOR fixings after the conversion date
- To preserve the current LIBOR and possible future LIBOR fixings after conversion date, an operational overlay (RFR vs LIBOR) is booked as two fixed/float instruments (0% vs RFR / 0% vs LIBOR)
- LCH's rulebook aims to characterize the conversion as a legal amendment

Automated processing of the conversion in the systems

- There are several ways to feed the new data into your internal systems (e.g. ATTS Sync via MarkitWire, FpML files via LCH portal, LCH reporting etc.)

Transition of cleared LIBOR swap contracts by LCH – challenges and difficulties

- All trades must be converted in one coordinated event.
- Especially for large portfolios, interfaces need to be set up to process the conversion automatically.
- Payment offset between fixed and float leg can be demanding for some systems.
- Presence of overlay swaps may require manual corrections in your accounting systems (Note: LCH's rulebook aims to characterize these as an operational device).
- Due to spread adjustment, solo blended rate compression with zero-spread RFR swaps is not possible (but RFR swaps with the same spread will blend).

Advantages of early conversion

- Avoidance of fees (as of September, there will be a monthly fee of GBP 5.00 for every outstanding LIBOR contract plus a fee for the conversion).
- Early and gradual conversion reduces operational risks.
- No change in gross notional.

Transition of ICE LIBOR Futures

Circular 21/049 - Publication of the ICE Futures Europe LIBOR Transition Plans

LIBOR Transition Approach

ISDA conducted an industry-wide consultation, outlining several options for the conversion of LIBOR rates to alternative RFRs. The industry recommendation was that new contracts replacing LIBOR contracts would be based instead upon the alternative RFR. However, a fallback rate then needs to be added, representing the deemed difference in value between the relevant LIBOR and replacement RFR rates. [Since LIBOR is a future-looking rate, whilst RFRs are daily rates based on recent historic data, a timing issue arises as to how they should be compared.] For purposes of calculating the fallback rate, RFRs are compounded in arrears.

ISDA LIBOR Fallback Rate = RFR compounded in arrears + ISDA Fallback Spread*

The spread adjustment is based on a historical median approach, the historical differences between the LIBOR rate for the tenor versus the compounded RFR over a 5-year period. ISDA announced that the effect of the FCA Cessation Announcement confirming the cessation of LIBOR at year end 2021 triggered the calculation. On 25 January 2021 the ISDA 2020 IBOR Fallback Protocol and Supplement came into effect, allowing firms to incorporate the new IBOR fallbacks into existing (legacy) derivatives agreements.

ICE intends to transition OI in existing listed LIBOR contracts into positions on equivalent contracts referencing their replacement RFR, e.g. Short Sterling to SONIA, as detailed in the following sections.

Timing

ICE plans to convert OI held in Three Month Sterling (Short Sterling) Futures and Options and Three Month Euro Swiss Franc (EuroSwiss) Futures into Three Month SONIA Index Futures and Options and Three Month SARON Index Futures respectively following the close of business on **Friday 17 December 2021** ("Transition Date"). The conversion will be applicable to all contract delivery months.

Exchange Recommendation on Conversion

The Exchange recommends that Members holding OI in Transitioning LIBOR Contracts expiring beyond 2021 identify and carefully monitor their positions. Exchange Participants are encouraged to actively convert LIBOR positions into equivalent RFR positions ahead of the transition, where viable, using the Exchange's existing trading functionality of Inter-Contract Spreads and Asset Allocation Trading Facilities.

Three Month Euro Swiss Franc (EuroSwiss) Futures Conversion Approach

Open Contract Positions in Three Month Euro Swiss Franc (EuroSwiss) Futures will be converted to Open Contract Positions in Three Month SARON Index Futures. The conversion formula will be:

3M CHF LIBOR Fallback Rate
= 3M Compounded in Arrears SARON + ISDA Fallback Spread

(3)

EurexOTC Clear: Transition plan for transactions referencing the CHF, GBP, JPY and USD LIBOR benchmarks

Eurex Clearing Circular 022/21 EurexOTC Clear and Eurex Clearing Readiness Newsflash (26 May 2021)

Overview

The 022/21 circular contains information with respect to the service offering of Eurex Clearing AG (Eurex Clearing) regarding the following topics:

- Intention to actively convert OTC Clear IRS and basis swaps referencing CHF, GBP, JPY and USD LIBORs before index
 cessation date
- Treatment of LIBOR-based Forward Rate Agreements and USD LIBOR-based Swaps with stubs relying on 1W and 2M fixings

Eurex Clearing plans to execute the conversion of EurexOTC Clear trades referencing

- CHF and JPY LIBOR starting on 3 December 2021 and executed over that weekend and
- GBP LIBOR starting on 17 December 2021 and executed over that weekend.

The intended conversion of LIBOR portfolios in CHF, GBP, JPY and USD as well as the necessary amendment of clearing eligibility of the announced instruments may have an impact on clearing participant's internal processes and positions. Therefore, it might be necessary for clearing participants to update their internal processes and technical interfaces to take these proposed changes into account.

To keep in line with bilateral market practice, Eurex Clearing introduced amendments to its index cessation regime for OTC transactions. In particular, Eurex Clearing reflected the core provisions of this ISDA IBOR Fallbacks Supplement in its Clearing Conditions which became effective on 25 January 2021, as published in Eurex Clearing Circular 112/20.

Transition of CHF LIBOR swaps to SARON swaps

- Figures show an approximate 60/40 split of traded volumes in SARON's favour in May.
- Volumes based on CHF LIBOR remain considerable.
- However, some of these volumes are due to the active reduction of outstanding CHF LIBOR swaps where market participants are trading CHF LIBOR swaps to offset existing trades.
- A transition of cleared and bilateral derivatives ahead of end-2021 is beneficial.
 - Risks with cleared derivatives (conversion in December 2021):
 - Converted swaps are not identical to standard SARON swaps, e.g. there are technical differences on both legs of each swap.
 - The conversion might involve a second step beyond 2021, with additional IT implications.
 - Risks with bilateral derivatives (ISDA documentations):
 - Not all counterparties might have signed the ISDA protocols.
 - Operational risks remain (IT risks with handling all trades at end-2021 and applying the fallback).

The NWG repeats its recommendation to transition bilateral and cleared derivatives ahead of yearend 2021 (transition now) and reminds participants that fallbacks are just a "safety belt".

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- c) Start date(s) for using only SARON as price reference and benchmark in the derivative markets (SARON First)
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 - SARON conventions in derivatives (e.g. swaps, swaptions)
 - Start date for RFR CCBS
- d) Further fallback guidance regarding the CHF LIBOR swap curve

Start date of SARON swap curve as new price reference for bonds

- Currently, most CHF bonds are still priced on the basis of the CHF LIBOR swap curve.
- The SARON swap curve is sometimes used as an indication.
- Ideally, all new CHF bond issuance should be priced based on the SARON swap curve ahead of year-end 2021.
- A specific date for the switch to the SARON swap curve as new price reference for bonds should boost the transition and give investors and issuers more guidance.

The NWG recommends that all market participants (investors and issuers) switch to the SARON swap curve as the only pricing reference starting 1 September 2021, at the latest.

Start date to use SARON conventions in derivatives

- In the UK, a "SONIA First" initiative was launched.
 - In a first step, the FCA and BoE encouraged to adopt new <u>quoting conventions for inter-dealer</u> trading based on SONIA instead of LIBOR from 27 October 2020.
 - In a second step, the FCA and the BoE encouraged market participants in a switch to SONIA in the sterling non-linear derivatives market from 11 May 2021.
 - In a third step, the FCA and BoE encouraged market participants in a switch to SONIA in the sterling exchange traded derivatives market from 17 June 2021.
- In the US, a similar initiative, the "SOFR First" was launched. The <u>recommendation</u> states that from 26 July 2021 interdealer brokers shall replace trading of LIBOR linear swaps with trading of SOFR linear swaps. The SOFR First best practice recommends keeping interdealer brokers' screens for LIBOR linear swaps available for informational purposes, but not trading activity, until 22 October 2021. After this date, these screens should be turned off altogether.
- The FSB and FINMA roadmaps state Q2 2021 as a general start date to use RFR in new contracts.
- For cross-currency swaps (CCBS), a later start date than 1 July 2021 might be ideal (see next slide).

The NWG recommends to use only SARON-based derivatives for new transactions starting from 1 July 2021, excluding transactions that reduce or hedge LIBOR exposures.

Start date to switch quoting conventions from LIBOR to RFR in CCBS (I)

Background

- The cross-currency swaps (CCBS) market is still largely based on LIBOR.
- The FSB and FINMA roadmaps state Q2 2021 as a general start date to use RFR in new contracts.
- The <u>NWG</u> recommended in February 2021 to consider to renegotiate legacy LIBOR-based to RFR-based USD / CHF CCBS ahead of end-2021. For **new** USD / CHF CCBS, the NWG and <u>ARRC</u> recommended using **RFRs for both legs** and the NWG has <u>published</u> a term sheet.
- So far, no specific start date for the switch of CCBS quoting conventions has been announced.

Challenge

- Market participants have raised that quoting conventions of CCBS would ideally switch from LIBOR to RFR at the same time.
- An internationally coordinated start date for a switch in quoting conventions of CCBS is challenging, as there are slight differences in national timelines.
 - The UK RFR WG stated in its <u>roadmap</u> Q2/Q3 2021, where new cross-currency derivatives should switch from a LIBOR-linked sterling leg to a SONIA leg.
 - In the US, it is <u>expected</u> that a specific date in H2 2021 will be recommended for a switch in quoting of CCBS from LIBOR to SOFR.

Start date to switch quoting conventions from LIBOR to RFR in CCBS (II)

Work done so far

- Members of the US, UK, JP, EU and Swiss working groups are currently considering a proposal to recommend a common start date for the switch from LIBOR to RFR
- So far, current discussion favor 7 or the 21 September 2021 as a start date to switch quoting conventions of cross-currency swaps in both LIBOR legs to RFR.
- However, not all working groups have completed their discussions.
- In order to promote and accelerate the transition of liquidity from LIBOR to RFR in the CCBS market and the derivative market as a whole, the quoting conventions of cross-currency swaps in the interdealer broker market would ideally switch from LIBOR to RFR at the same time.

The NWG supports both dates, which are currently being discussed internationally – 7 and 21 September 2021 – as start dates to switch quoting conventions of cross-currency swaps in all five LIBOR currencies to RFR (i.e. SOFR, SONIA, TONA, €STER and SARON).

Topics

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 - Start date for RFR CCBS
- d) Further fallback guidance regarding the CHF LIBOR swap curve

Further fallback guidance regarding the CHF LIBOR swap curve (I)

Background

- IBA provides for the USD, GBP fixings of the LIBOR swap curve (ICE Swap Rate) & Refinitiv for the JPY fixing
 of the LIBOR swap curve (Tokyo Swap Rate TSR).
- The <u>UK RFR WG</u> published a paper on a possibly fallback methodology. The <u>ARRC</u> published a similar paper.
- Refinitiv recently consulted on a proposed fallback methodology for JPY LIBOR TSR.
- ISDA currently consults on fallback rates for USD and GBP ICE Swap Rates.
- For CHF, there is no published benchmark for the LIBOR swap curve and therefore banks / calculation agents ask quotes from reference banks.
- The CHF LIBOR swap curve is used e.g. for CHF hybrid bonds, where the NWG issued a recommendation at its meeting in February 2021.

Challenge

- The CHF LIBOR swap curve is also used to determine settlement amounts for cash settled swaptions as well as other products (e.g. constant maturity swaps), and will be used as well for swaptions with cleared physical settlement in case CCPs stop accepting CHF LIBOR swaps upon exercise.
- As flagged by the WG for other currencies, the disappearance of LIBOR swaps will therefore cause issues to settle the above products, unless a fallback methodology / rate is available.

Further fallback guidance regarding the CHF LIBOR swap curve (II)

- NWG recommendation for CHF hybrid bonds is compatible with technical recommendation of the UK RFR for non-linear derivatives (see appendix). If different day count conventions are taken into account, the difference in the resulting swap rate is usually smaller than ¼ bp (for (absolute) rate levels < 10%).
- However, for very large positions or e.g. exotic options, an exact calculation may be suitable.
- Implementation in legal contracts: could be achieved via supplement to ISDA 2006 definitions (for new trades) and bilateral template amendment (for legacy trades) provided by ISDA.

NWG recommends for derivative products referencing the CHF LIBOR swap curve (e.g. swaptions) to use a similar formula as recommended for CHF hybrid bonds, but with additional technical adjustments (see formula – in analogy to the technical recommendation of UK RFR WG).

Formula for derivative products referencing the CHF LIBOR swap curve

Tenor > 1Y:
$$Fallback_{year\ i} = \frac{365.25}{360} \left[SOIS_{year\ i} + \frac{spread_{6M} \left((1 + SOIS_{year\ i})^{\frac{1}{2}} + 1 \right)}{2} \right]$$

$$Tenor = 1Y: Fallback_{year\ 1} = \frac{365.25}{360} \left[SOIS_{year\ 1} + \frac{spread_{3M} \left(\left((1 + SOIS_{year\ 1})^{\frac{1}{4}} + 1 \right) \left((1 + SOIS_{year\ 1})^{\frac{1}{2}} + 1 \right) \right)}{4} \right]$$

Where:

- Fallback_{vear i} is the fallback rate for the CHF LIBOR swap curve at year i
- SOIS_{vear i} is the CHF SARON OIS rate for year i

- spread_{6M} is the fixed ISDA Spread for the 6M CHF LIBOR rate; and
- $-spread_{3M}$ is the fixed ISDA Spread for the 3M CHF LIBOR rate.

2021 ISDA Interest Rate Derivatives Definitions

- On June 11, 2021, ISDA published the 2021 ISDA Interest Rate Derivatives Definitions, the latest in a series of definitional booklets that have provided the framework for documenting interest rate derivatives transactions since 1985.
- The 2021 Definitions are published in a purely digital format via ISDA's new interactive web-based user interface,
 MyLibrary.
- Consolidation the 2021 Definitions consolidates the +76 Supplement published under the 2006 Definitions.
- Key changes the main areas of change to content in the 2021 Definitions compared to the 2006 Definitions are as follows:
 - Cash Settlement Methods
 - Floating Rate Options
 - Fallbacks
 - Days, Dates and Periods
 - Calculation Agent provisions
- Amendments future amendment to the 2021 Definitions will be implemented by re-versioning the entire book; no more Supplements.
- Implementation the 2021 Definitions will be implemented by major infrastructures (such as LCH, CME, Eurex, MarkitWire etc) on the 4th October 2021.
- Educational materials ISDA has published the following educational materials:
 - Factsheet https://www.isda.org/2021/04/19/introduction-to-the-2021-isda-interest-rate-derivatives-definitions/
 - In-depth paper setting out the key changes https://www.isda.org/2021/06/24/key-changes-in-the-2021-isda-interest-rate-derivatives-definitions/
 - ISDA website 2021 Definitions hub https://www.isda.org/2021/05/01/2021-isda-interest-rate-derivatives-definitions/

6. Further guidance on fallback languages

ISDA's fallback language and the usage of its spread for other products

Background

- ISDA's fallback language was a multi-year process with several consultations. The fallback language is now internationally widely adopted, not just for contracts under ISDA documentation but also for other cash and derivatives products.
 - The ARRC has <u>confirmed</u>, reflecting clear results of a public consultation, that it would recommend use of the ISDA spread adjustments in cash products.
 - The UK RFR WG published a consultation paper in December 2019 considering methodologies that could be used to calculate the adjustment spread for fallback language in sterling cash instruments. The consultation produced a strong consensus in favour of the approach adopted by ISDA, and the working group has formally recommended the use of the ISDA spread adjustments in these cash instruments.
 - The Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks has consulted on spread adjustment methodologies for cash instruments, and <u>recommended</u> the use of the ISDA spread adjustments in August 2020.
 - The <u>FSB supports</u> to use the ISDA spread adjustments in cash products.
- The NWG also recommended several times to use the ISDA spread adjustments for specific products. In September 2020, the NWG recommended to use the ISDA spread adjustments in cash products such as retail loans or for bilateral loans with corporates or SME. In February 2021, the NWG recommended to use the ISDA spread adjustments for fallback language in hybrid bonds and agreed to publish a rate switch amendment agreement for syndicated loans that refers to the ISDA spread adjustments.

The NWG recommends using compounded SARON and, in case a spread adjustment is applied, CHF ISDA spreads as a reference point for a fallback rate for CHF LIBOR for all kind of products if no other fallback rate is specified.

Possible in-advance fallback methodology for CHF LIBOR

Background

- Some mortgages in EU Member States are based on CHF LIBOR. Due to consumer regulations, an in-arrears rate is not in all EU Member States possible (see also <a href="https://www.nwc.number-num
- Market participants have asked the EU Commission to designate a fallback rate for CHF LIBOR, as otherwise a private contractual conversion from CHF LIBOR to compounded SARON could be subject to litigation.
- The <u>EU Commission has consulted</u> on the suitability of designating a statutory replacement rate for CHF 3M LIBOR in mortgages and small business loans concluded prior to the entry into application of the EU Benchmark Regulation and governed by the laws of one of the EU Member States. The consultation proposed the SARON Compound Rates and the CHF ISDA spreads as a fallback rate for CHF LIBOR. Furthermore, the consultation proposed the option Last Reset.
- The received <u>feedback</u> to the consultation indicates the need to also designate a statutory replacement rate for other tenors.
 However, for longer tenors, responses indicate that the option Last Recent is more reasonable than the option Last Reset.
- For new products, institutions should individually define their product strategy given the guidance on options using compounded SARON. For remaining fallbacks, i.e. no other fallback rate is so far specified, a clear and simple methodology is reasonable.

In case the fallback rate needs to be known in advance and no other fallback rate is specified, the NWG recommends to consider the Last Recent option and the SARON 1M Compound Rate for compounded SARON in the fallback methodology. Hence, e.g. for a fallback rate for CHF 6M LIBOR, the recommendation – if no other fallback rate is specified and the fallback rate needs to be known in advance – is to consider SARON 1M Compound Rate in advance and the CHF 6M ISDA spread as a fallback rate for CHF 6M LIBOR.

7. Recommendations and next steps

Recommendations I

The NWG recommends:

- to also consider the option Last Recent and the SARON 1M Compound Rate as an option for using the SARON Compound Rate.
- that all Lead Arrangers of LIBOR-based syndicated loans maturing after 2021 reach out to syndicate participants and borrowers as soon as possible to arrange the switch to a RFR. Likewise, all participants and borrowers in syndicated loans should proactively contact the Lead Arrangers and request such a switch.
- for trade finance in CHF the use of either Last Recent SARON 1M Compound Rate or e.g. for sophisticated institutions Cost of Funds based upon the individual weighting of the need of a public benchmark vs. the need of hedgeability.
- to consider the option Last Recent and the SARON 1M Compound Rate for intercompany loans in CHF.
- that all market participants (investors and issuers) switch to the SARON swap curve as the only pricing reference starting 1 September 2021, at the latest.
- to use only SARON-based derivatives for new transactions starting from 1 July 2021, excluding transactions that reduce or hedge LIBOR exposures.

Furthermore, the NWG supports both dates, which are currently being discussed internationally – 7 and 21 September 2021 – as start dates to switch quoting conventions of cross-currency swaps in all five LIBOR currencies to RFR (i.e. SOFR, SONIA, TONA, €STER and SARON).

Recommendations II

The NWG recommends:

- for derivative products referencing the CHF LIBOR swap curve (e.g. swaptions) to use a similar formula as recommended for CHF hybrid bonds, but with additional technical adjustments (see formula – in analogy to the technical recommendation of UK RFR WG).
- using compounded SARON and, in case a spread adjustment is applied, CHF ISDA spreads as a reference point for a fallback rate for CHF LIBOR for all kind of products if no other fallback rate is specified.
- in case the fallback rate needs to be known in advance and no other fallback rate is specified, to consider the Last Recent option and the SARON 1M Compound Rate for compounded SARON in the fallback methodology. Hence, e.g. for a fallback rate for CHF 6M LIBOR, the recommendation if no other fallback rate is specified and the fallback rate needs to be known in advance is to consider SARON 1M Compound Rate in advance and the CHF 6M ISDA spread as a fallback rate for CHF 6M LIBOR.

Furthermore, the NWG repeats its recommendation to transition bilateral and cleared derivatives ahead of yearend 2021 (transition now) and reminds participants that fallbacks are just a "safety belt".

Remaining issues in the transition from CHF LIBOR to SARON

- -A survey among NWG members ahead of this meeting was conducted.
- The question was whether there are any material unaddressed topics that the NWG should still cover.
- -The vast majority reported that there are no material unaddressed topics.
- Some points that were mentioned in the survey have been discussed in today's meeting.
- Members would like to continue to be informed about the transition.

Next steps

- The Executive Summary of today's meeting will be published on the NWG's webpage by tomorrow.
- -The NWG and its sub-groups will continue to
 - 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.
 - -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 documents

- The next NWG meeting is scheduled for 3 November 2021, 15:00-17:00 (CET) Note that the NWG meeting has been moved to 9 November 2021, 15:00-17:00 (CET)
- Publication of NWG's recommendations
 - -Executive summary of the meeting by 2 July 2021
 - Meeting minutes will be published on NWG website

Appendix

Appendix Items

- a) Further guidance on SARON-based syndicated loans
- b) Technical recommendation of the UK RFR and the NWG recommendation for CHF hybrid bonds

Summary and clarification of terms for SARON-based syndicated loans

The NWG has issued the following recommendations regarding syndicated loans:

- Use the Lookback method for CHF syndicated loans with an offset of 5 business days
- 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.
- 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.

While the recommendations are based on cumulative compounded SARON, Daily Non-Cumulative compounding is also seen as a viable option (see slide 22).

The following slides aim to summarize and clarify certain key conventions for SARON-based syndicated loans (see also supporting slides of the UK WG).

Summary and clarification of terms for SARON-based syndicated loans

- **RFR**
- **RFR Administrator**
- **Publishing Time**
- **SIX Business Day**

- **Calculation of Periods**
- **Business Day Convention**
- **Day Count**
- Lookback Period

- SARON (Swiss Average Rate ON), published with 6 decimal places
- SIX Financial Information AG
- 6 pm (CET) at SIX Business Day
- means a day (other than a Saturday or Sunday) which is not marked as currency holiday for CHF in the Trading & Currency Holiday Calendar published by SIX Swiss Exchange
- First Day shall be taken into account, but not the last day
- Modified Following Business Day: a payment date that falls on a non-Business Day, shall be postponed to the next following Business Day, unless that day falls in the next calendar month, in such case the payment shall take place on the preceding day that is a Business Day
- act / 360
- 5 SIX Business Days

Rounding conventions for SARON-based syndicated loans: **Cumulative Compounded SARON**

with Observation Shift

without Observation Shift (Lag)

Annualised cumulative compounded SARON / ACR

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_{i-5}}{360} \right) - 1 \right] \times \frac{360}{d_c} \qquad \left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_i}{360} \right) - 1 \right] \times \frac{360}{d_c} \right]$$

$$d_c = \sum_{i=1}^{d_b} n_{i-5} \qquad d_c = \sum_{i=1}^{d_b} n_i$$

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_i}{360}\right) - 1\right] \times \frac{360}{d_c}$$

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

Rounding

Round ACR to 4 decimal places, with 0.00005 being rounded upwards

Rounding conventions for SARON-based syndicated loans: Daily Non-Cumulative Compounded SARON

with Observation Shift

without Observation Shift (Lag)

ACR / Annualised cumulative compounded **SARON***

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_{i-5}}{360}\right) - 1\right] \times \frac{360}{d_c} \qquad d_c = \sum_{i=1}^{d_b} n_{i-5} \qquad \left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_i}{360}\right) - 1\right] \times \frac{360}{d_c} \qquad d_c = \sum_{i=1}^{d_b} n_i =$$

$$d_c = \sum_{i=1}^{d_b} n_{i-5}$$

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_{i-5} \times n_i}{360} \right) - 1 \right] \times \frac{360}{d_c}$$

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

Rounding

UCR / Unannualised cumulative compounded **SARON**

Rounding

NCR / daily noncumulative compounded SARON

Rounding

round ACR to 4 decimal places, with 0.00005 being rounded upwards

$$ACR_i * \frac{tn_i}{360}$$

$$ACR_i * \frac{tn_i}{360}$$

No Rounding

$$(UCR_i - UCR_{i-1}) * \frac{360}{n_i}$$

$$(UCR_i - UCR_{i-1}) * \frac{360}{n_i}$$

No Rounding

^{*} Strictly speaking, the formula defines ACR_{dh} . So ACR_i means the corresponding value for the subperiod ending on day i in the interest period ($i = 1, ..., d_h$)

Definitions

" d _b "	means the number of SIX Business Days in the relevant Interest Period;
"d _c "	means the number of calendar days in the Observation Period (in case of "with observation shift") or Interest Period (in case of "without observation shift (lag)");
" i "	means the series of whole numbers from one to d_b , labelling the days in the Interest Period, i.e. $i=1$ means the first day in the Interest Period; *
"n _i "	means the number of calendar days SARON; applies;
"SARON _i "	means the SARON on SIX Business Day "i" and "SARON _{i-5} " indicates the SARON on the day falling five SIX Business Days before SIX Business Day "i";
"tn _i "	means the number of calendar days from, and including, the first day of the Cumulation Period to, but excluding, the SIX Business Day which immediately follows the last day of the Cumulation Period.

^{*} Please note that this defintion of «i» is according to the Rate Switch Amendment Agreement, but slightly different from the definition by other currency working groups..

Appendix Items

- a) Further guidance on SARON-based syndicated loans
- b) Technical recommendation of the UK RFR and the NWG recommendation for CHF hybrid bonds

Technical recommendation of the UK RFR and the NWG recommendation for CHF hybrid bonds (Feb. 2021)

UK RFR WG: Transition in Sterling Non-Linear Derivatives referencing GBP LIBOR ICE Swap Rate

$$y^{L} = \begin{cases} 2\left((1+y^{OIS})^{\frac{1}{2}}-1\right) + s^{6M} & \text{tenor} > 1Y \\ y^{OIS} + s^{3M} & \frac{\left((1+y^{OIS})^{\frac{1}{4}}+1\right)\left((1+y^{OIS})^{\frac{1}{2}}+1\right)}{4} & \text{tenor} = 1Y \end{cases}$$
 (1)

NWG recommendation for CHF hybrid bonds (Feb. 2021)

"In case of a reference to a swap rate (e.g. 5Y) with CHF LIBOR as a reference rate (typically for repricings at call dates), SARON swap rate (e.g. 5Y) + (corresponding w.r.t. the tenor) ISDA's adjustment spread should be used. "

Where:

- y^L is the replacement for the GBP LIBOR ISR;
- y^{OIS} is the GBP SONIA ISR;
- s^{6M} is the fixed ISDA Spread for the 6M GBP LIBOR rate; and
- s^{3M} is the fixed ISDA Spread for the 3M GBP LIBOR rate.
- (1) accounts for different payment frequencies of the *fixed* leg of GBP LIBOR vs. SONIA swaps for tenor > 1Y
- (2) accounts for different payment frequencies of the *fixed* vs. float leg of GBP LIBOR swaps for tenor = 1Y
- Not necessary in CHF, since CHF LIBOR and SARON swap fixed legs both have yearly payment
- ⇒ Would for CHF also be relevant for tenor > 1Y, but results in differences usually smaller than ¼ bp (for (absolute) rate levels < 10%)