

Minutes from the meeting of the National Working Group on CHF Reference Interest Rates (31 October 2018)

1. Introduction

- The two co-chairs of the National Working Group on CHF Reference Rates (NWG) welcomed all attendees to the twentieth meeting and reminded them of their responsibilities related to [competition law and confidentiality](#). The aim of the meeting was to provide a recommendation for a SARON-based term rate, to present and discuss a draft fallback template for new retail loans referencing LIBOR under Swiss law, and to provide market participants with a checklist to support them in becoming operationally ready for the transition from LIBOR to SARON.

2. Update on SARON-linked products

- Meeting participants were provided with a brief update on SARON-based derivatives markets:
 - SARON swaps are cleared by LCH and Eurex. The volume is concentrated at LCH. Open interest has fluctuated around CHF 30-35 bn, suggesting that SARON swaps have reached the volumes of the former TOIS swaps. However, volumes are still relatively small compared to swaps referencing LIBOR. It is expected that volumes will pick up once cash products are based on SARON.
 - SARON Futures: On 29 October 2018, Eurex launched 3M SARON Futures based on the [recommended specifications](#) by the NWG and first test trades were conducted. The current naming convention by Eurex is due to technical reasons and may again be changed in Q1 2019, to align with futures contracts in other currencies.
- Meeting participants were informed about the increased issuance activity in floating rate notes linked to SOFR and SONIA. However, no market standard has emerged yet and there are different practices with respect to interest rate determination and payment/settlement provisions. There have been no debt issuances linked to SARON yet.
- A representative of the administrator of SARON, SIX, provided an update on the application process of SARON to be endorsed under the EU Benchmark Regulation. SIX expects the endorsement process to be completed before the transitional period ends, which is at the end of 2019. Furthermore, SIX envisages to be ready to start publishing daily fixings of the compounded SARON (across several maturities) in a few months.

3. SARON-based term rate as LIBOR alternative

- A terminology for term rates was presented. Approaches reflecting a sequence of expected overnight rates (cash- and derivatives-based, e.g. LIBOR and ICE-fix, respectively) are referred as forward-looking term rates, approaches reflecting a sequence of realized overnight

rates (compounded in arrears and in advance) are referred as compounded term rates (see also slide 12 attached).

- An overview of the assessment of SARON-based term rates was provided (see also slide 13 attached). The assessment was based on the work of the “derivatives and capital market” (D&C) and the “loan and deposit market” (L&D) sub-working groups. The assessment focused on two key criteria: (1) What are the needs of the end users? (2) Is the term rate feasible?
- Regarding (1): The L&D sub-working group organized a workshop for corporates in September 2018 and conducted bilateral discussions with corporates thereafter. Results showed that end-users indicated a variety of needs for reference rates (see also slide 14 attached). The characteristics most often mentioned were that the reference rate serves as official fixing, that the payment is known at the start of the period, and that the reference rate is based on a robust underlying market.
- Regarding (2): The D&C sub-working group assessed the feasibility of a derivatives-based term rate on the basis of SARON Futures and SARON swaps.
 - Assessment of a term-rate based on SARON Futures: Determining a futures-based term rate requires an interpolation between two futures prices (except on settlement dates i.e. IMM dates) and an assumption on how the underlying rate (SARON) evolves between two settlement dates. Additional to the assumption that the underlying rate follows a staircase function, assumptions on the timing of interest rate changes are required. If these assumptions do not reflect market expectations, the futures-based term rate would deviate from swap prices, which could undermine its credibility. These methodological issues make it very challenging to construct a robust futures-based term rate, even if liquidity were to shift entirely from LIBOR Futures to SARON Futures in the future.
 - Assessment of a term-rate based on SARON swaps: With swaps the above-mentioned methodological issues could be avoided, provided that the tenor of the swap is equal to the tenor of the term rate that needs to be determined. However, this requires sufficient liquidity in each tenor of the term rate. Even in the currently most active tenor, the 3M tenor, liquidity is relatively shallow. If volumes were to increase as the transition proceeds, liquidity in short-term tenors (1M, 3M, 6M) most likely would remain insufficient, as the bulk of transactions is expected to be in longer maturities given the hedging needs of market participants. Besides liquidity issues, data sourcing issues prevail with SARON swaps as OTC instruments.
- On the basis of this assessment regarding the need and feasibility of a term rate and in line with the guidance provided by the Financial Stability Board (FSB) on term rates¹, the majority of NWG members agreed that a robust derivatives-based term rate is not feasible. Every forward-looking term rate based on derivatives of SARON will not be as robust as the reference rate itself. If the situation were to change in the future (and it was noted that the NWG would follow the development of the SARON derivatives market), the use of a derivatives-based term rate

¹ FSB, «Interest rate benchmark reform – overnight risk-free rates and term rates» (<http://www.fsb.org/wp-content/uploads/P120718.pdf>)

as a fallback rate might be reassessed. Therefore, wherever possible a compounded SARON should be used as a term rate.

- Using a compounded term rate could lead to cash flow uncertainty. However, there are ways to mitigate or solve cash flow uncertainty and further work needs to be conducted as to how these could work in practice and regarding potential legal challenges. At the next NWG meeting, the two sub-working groups will present such solutions in more detail. The Loan Market Association noted their concerns regarding the use of compounded SARON for some segments of the cash market which might be reliant on forward-looking term rates (multi-currency syndicated loans in particular).
- There was a discussion about the work regarding term rates in other jurisdictions (see the Alternative Reference Rate Committee² and the Working Group on Sterling Risk-Free Reference Rates³). Other jurisdictions intend to develop a derivatives-based forward looking term rate or to consult the market regarding methodology or need. However, the specific characteristics of the Swiss market mean that a derivatives-based term rate is currently not feasible.

4. Fallback language

- A fallback template for new retail loans which continue to use CHF LIBOR as a reference rate was presented and discussed. Representatives from Homburger, a Swiss corporate law firm, presented a draft for a fallback template for retail loans under Swiss law.⁴ The template can serve as an example for a fallback language. Market participants have to decide whether and how they implement a fallback clause into retail loan contracts.

5. Operational readiness

- It was agreed to publish on the NWG-webpage a checklist with a broad overview of possible work tasks associated with the transition and products/contracts that will potentially be affected. The aim is to raise awareness and to help stakeholders to get operationally ready for the transition from LIBOR to SARON. Feedback to the document is highly appreciated and can be sent directly to nwg@snb.ch.

6. Recommendations

- NWG decisions:
 - Publication of “Operational Readiness Checklist”, feedback welcome to nwg@snb.ch.
- NWG recommendations to all market participants:
 - SARON-based term rate

² See <https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report>

³ See <https://www.bankofengland.co.uk/paper/2018/consultation-paper-on-term-sonia-reference-rates>

⁴ The template is available on Homburger's [website](#).

- It is unlikely that a robust derivatives-based term fixing is feasible.
- NWG recommends using a compounded SARON wherever possible.
- There are ways to mitigate or solve cash flow uncertainty.
- Operational readiness
 - Prepare for an expected transition to compounded SARON.
 - Get transparency on current volumes, currencies and maturity profile of existing book (e.g. loans, derivatives).
 - Get high-level understanding of technical implications and time-to-market.
 - Raise awareness on senior management level.
 - Start transacting in the new derivatives markets referencing SARON.
- Contractual robustness
 - Review / adapt new loan and deposit contracts with regard to a permanent LIBOR discontinuation.
 - Engage with ISDA in order to be kept abreast of new developments as well as to offer constructive feedback.

7. Next steps

- The following items will be addressed in the two sub-working groups:
 - Development of a SARON ecosystem: standards for forward rate agreements, floating rate notes and options.
 - Continuation of the work on standards for cross-currency basis swaps (international initiative).
 - Spell out solutions how uncertainty about cash flows can be addressed.
 - Raise awareness and assess capability of infrastructure providers to cope with compounded SARON.
 - Evaluation of cash flow hedging techniques and their effectiveness in accounting.
- The next NWG meeting is scheduled for Tuesday, 5 February 2019, 15:00 - 17:00. Personal attendance is highly appreciated, but it will also be possible to dial in by phone. The following items are targeted for the meeting:
 - Options on how to use a compounded SARON.
 - Report progress on transition to SARON (e.g. accounting issues and awareness among infrastructure providers).

Attendance at the 31 October 2018 Meeting

Martin Bardenhewer	– Zürcher Kantonalbank, co-chair
Marcel Zimmermann	– Swiss National Bank, official sector representative, co-chair
Uriel Amitai	– Intercontinental Exchange (by phone)
Pascal Anderegg	– Zürcher Kantonalbank
Christian Bahr	– SIX, SRR administrator
Rolf Bannwart	– LGT Bank
Markus Bieri	– Swiss Association of Corporate Treasurers
Marie-Anne Bourgoz Gorgé	– Banque Cantonale de Genève (by phone)
René Bösch	– Homburger
Guillermo De La Fuente	– Association of Corporate Treasurers - Suisse Romande (by phone)
Robert Eigenheer	– SBB
Fernando Fasciati	– Raiffeisen Switzerland
Beat Gabathuler	– Zürcher Kantonalbank (by phone)
Fernando Gardoni	– St. Galler Kantonalbank
Raffael Goldenberger	– Entris Banking
Thomas Graf	– Valiant (by phone)
Philipp Halbherr	– Swiss Bankers Association
Stephane Hegi	– Banque Cantonale Vaudoise (by phone)
Lukas Hetzel	– Swiss Bankers Association
David Horner	– LCH (by phone)
Otto Huber	– Credit Suisse, chair Sub-NWG D&C
Jenny Ivleva	– Eurex
Colt Lake	– UBS
Alfred Ledermann	– UBS, chair Sub-NWG L&D
Nicolas Lergier	– Graubündner Kantonalbank
Ernst Lienhard	– Swiss Re
Kam Mahil	– Loan Market Association (by phone)
Bruno Marin	– BNP Paribas
Jonathan Martin	– International Swaps and Derivatives Association
Benedikt Maurenbrecher	– Homburger
Franklin Meimoun	– Union Bancaire Privée
Claudio Menghi	– Nestlé
Katia Monkam	– Banque Cantonale Vaudoise (by phone)
Franck Paniandy	– Association of Corporate Treasurers - Suisse Romande (by phone)
Stefan Pomberger	– Bank Vontobel
Susanne Ramer	– SIX Treasury and Finance
Martin Scheck	– International Capital Market Association
Sandro Schmid	– Swiss Risk Association
Henrique Schneider	– Schweizerischer Gewerbeverband (by phone)
Roland Schwab	– PostFinance
René Schwyzer	– LGT Bank
Marco Steiner	– Pictet & Cie
Roland Studer	– Credit Suisse (by phone)
Thomas Sturzenegger	– Julius Bär
Martin Svrcek	– Credit Suisse
Pierre-Henri Turc	– Banque Cantonale de Genève (by phone)
Matthias Vögeli	– Swiss Life

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|-------------------|--|
| Andreas Wälchli | – Basler Kantonalbank |
| Philip Whitehurst | – LCH (by phone) |
| Sébastien Zöllner | – Swiss Bond Commission |
| | |
| Nicolas Graafen | – State Secretariat for International Finance, official sector representative |
| Stefan Kurt | – Swiss Financial Market Supervisory Authority, official sector representative |
| Roman Baumann | – Swiss National Bank, official sector representative |
| Matthias Jüttner | – Swiss National Bank, official sector representative |
| Basil Guggenheim | – Swiss National Bank, official sector representative |
| Benjamin Müller | – Swiss National Bank, official sector representative |
| Moritz Iten | – Swiss National Bank, official sector representative |

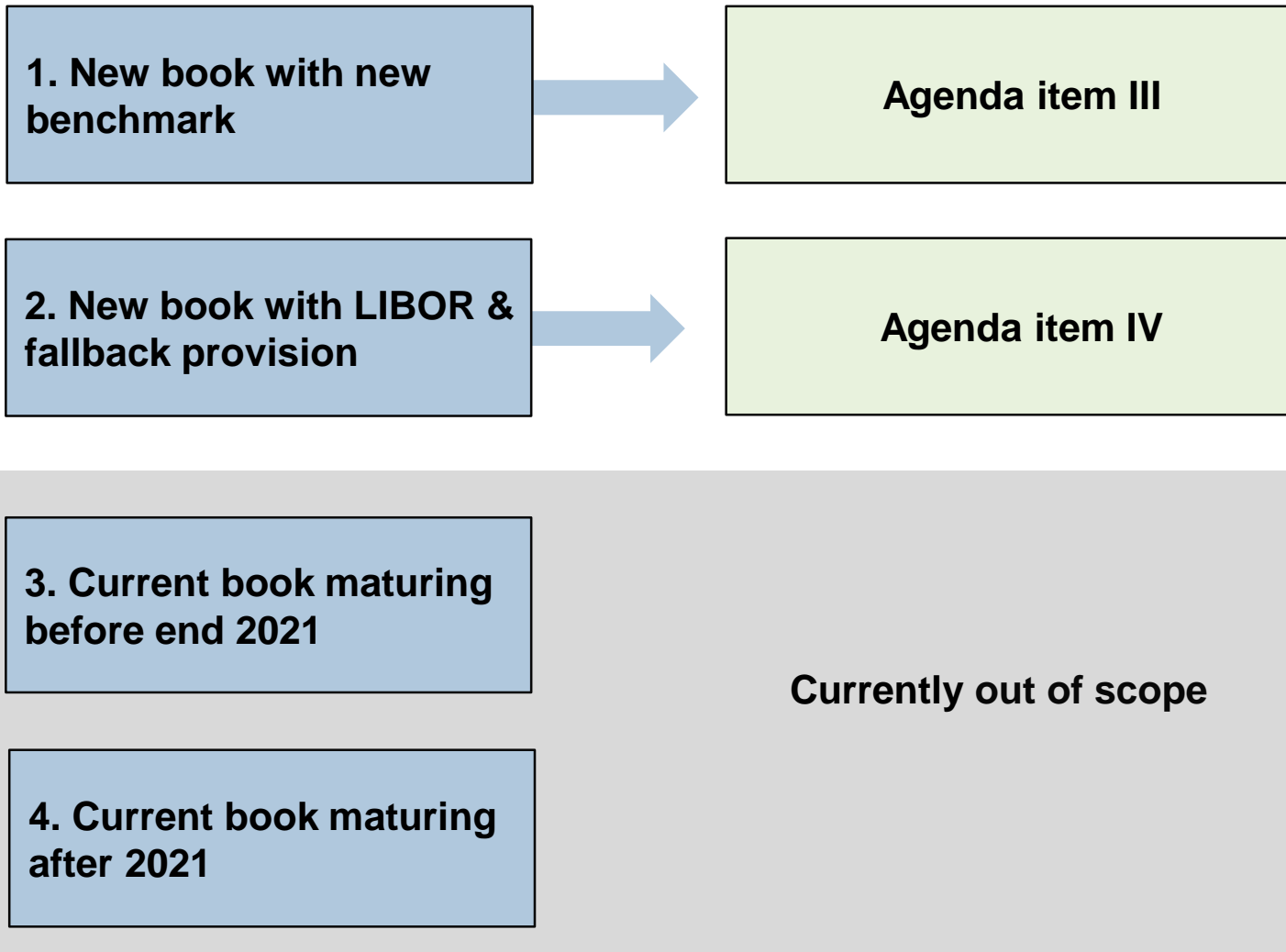
National Working Group on CHF Reference Rates

20th Meeting
31 October 2018

Agenda

- I. Opening remarks
- II. Update on SARON-linked products
- III. SARON-based rate as LIBOR alternative
- IV. Fallback language
- V. Operational readiness
- VI. Recommendations
- VII. Next steps

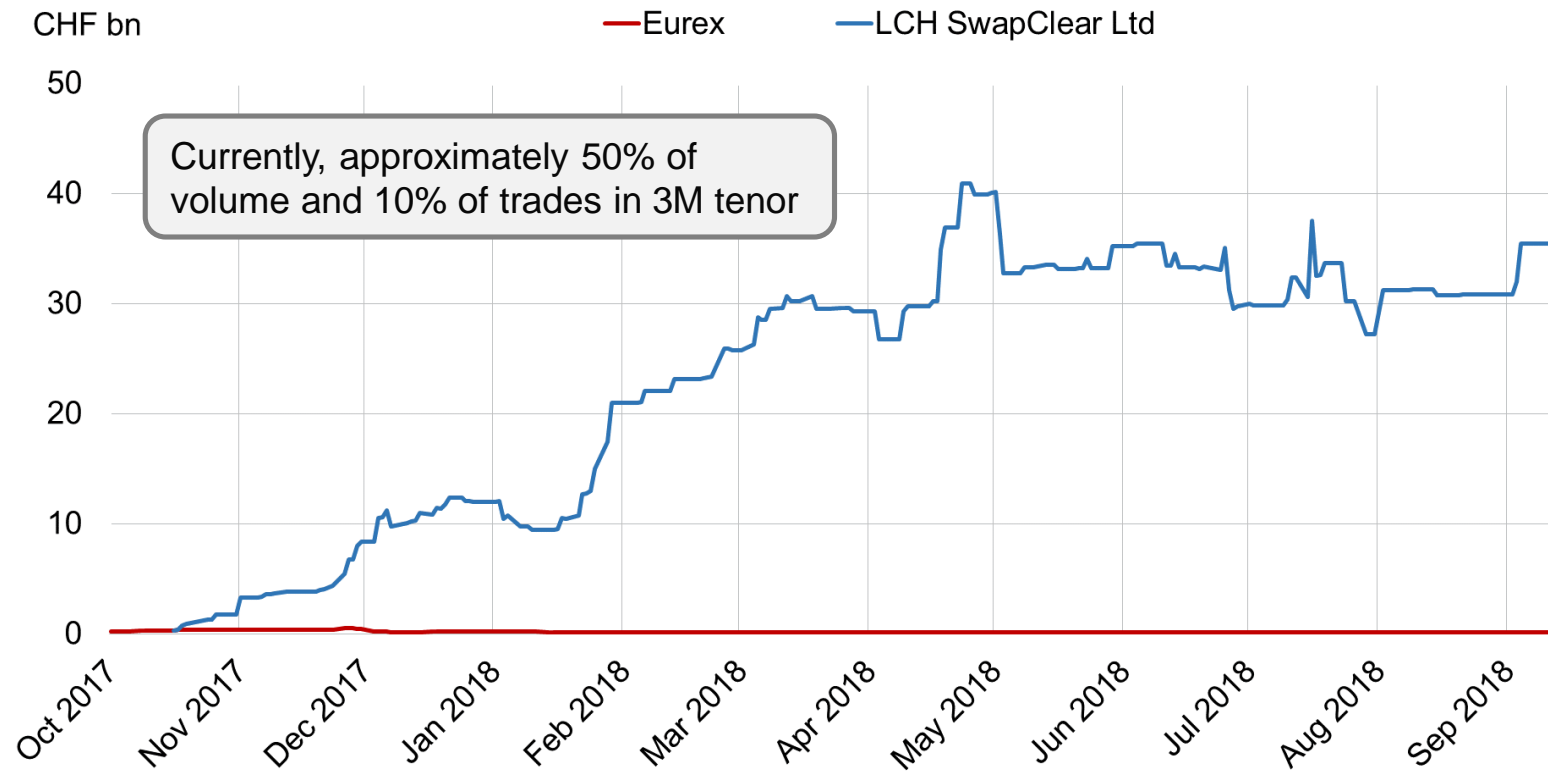
Focus: new contracts and not existing ones



II. Update on SARON-linked products

Developments in the SARON swap market

Open interest of SARON swaps (single counting, all tenors)



Source: Clarus

3M-SARON Futures started to trade on Eurex

Release date: 04 Oct 2018 | Eurex Exchange

No. 073/2018

Money Market Derivatives: Introduction of Three-Month SARON® Futures

The Management Board of Eurex Deutschland took the following decision effective **29 October 2018**:

- Introduction of Three-Month SARON® Futures

With the introduction of the Three-Month SARON® Futures, Eurex will offer a standardised, centrally cleared and cash settled exchange derivative for trading and clearing in the Swiss short-term interest rate market.

This circular contains all information on the introduction of the new product and the updated sections of the relevant Rules and Regulations of Eurex Deutschland.

Information on clearing of the new product as well as the updated sections of the relevant Rules and Regulations of Eurex Clearing AG are contained in Eurex Clearing circular 083/18, which we are providing to our Trading Participants as Attachment 2.

Increased issuance activity in floating rate notes; no market standard has emerged yet

Issuer	Issue Date	Pricing	Tenor (yrs)	Size	Interest Rate Determination	Coupon	Reset Date	Lockout Period
European Investment Bank	29.06.2018	SONIA + 0.35	5	GBP 1 bn	Compounded	Quarterly	t-5	N/A
Fannie Mae	30.07.2018	SOFR + 0.08 SOFR + 0.12 SOFR + 0.16	0.5 1 1.5	USD 2.5 bn USD 2.0 bn USD 1.5 bn	Average	Quarterly	t-1	4 days
World Bank	21.08.2018	SOFR + 0.22	2Y	USD 1 bn	Average	Quarterly	t-1	4 days
Credit Suisse	21.08.2018	SOFR + 0.35	0.5	USD 100 mn		Monthly	t-1	N/A
Barclays	22.08.2018	SOFR + 0.35	0.25	USD 525 mn				
MetLife	07.09.2018	SOFR + 0.57	2	USD 1 bn	Average	Quarterly	t-1	4 days
Lloyds Banking Group	13.09.2018	SONIA + 0.43	3	GBP 750 mn	Compounded	Quarterly	t-5	N/A
Santander	20.09.2018	SONIA + 0.43	3	GBP 1 bn		Quarterly	t-5	N/A
Triborough Bridge & Tunnel Authority	20.09.2018	SOFR * (0.67) + 0.43	13.5	USD 107.3 mn				
Wells Fargo	21.09.2018	SOFR + 0.35	1	USD 125mn		Monthly	t-1	N/A
Wells Fargo	25.09.2018	SOFR + 0.48	1.5	USD 1 bn		Quarterly	t-1	2 days
World Bank	04.10.2018	SONIA + 0.24	5	GBP 1.25 bn	Compounded	Quarterly	t-5	N/A
Credit Suisse	05.10.2018	SOFR + 0.38 SOFR + 0.27	1 0.5	USD 271 mn USD 785 mn		Monthly	t-1	N/A
JP Morgan Chase	19.10.2018	SOFR + 0.55	2	USD 800 mn		Quarterly	t-1	2 days
Fannie Mae	30.10.2018	SOFR + 0.04 SOFR + 0.07 SOFR + 0.10	0.5 1 1.5	USD 2 bn USD 1.5 bn USD 1.5 bn		Quarterly	t-1	2 days
Landeskreditbank Baden Württemberg Förderbank	31.10.2018	SOFR + 0.27	1	USD 12 mn		Quarterly	t-2	4 days

Next steps

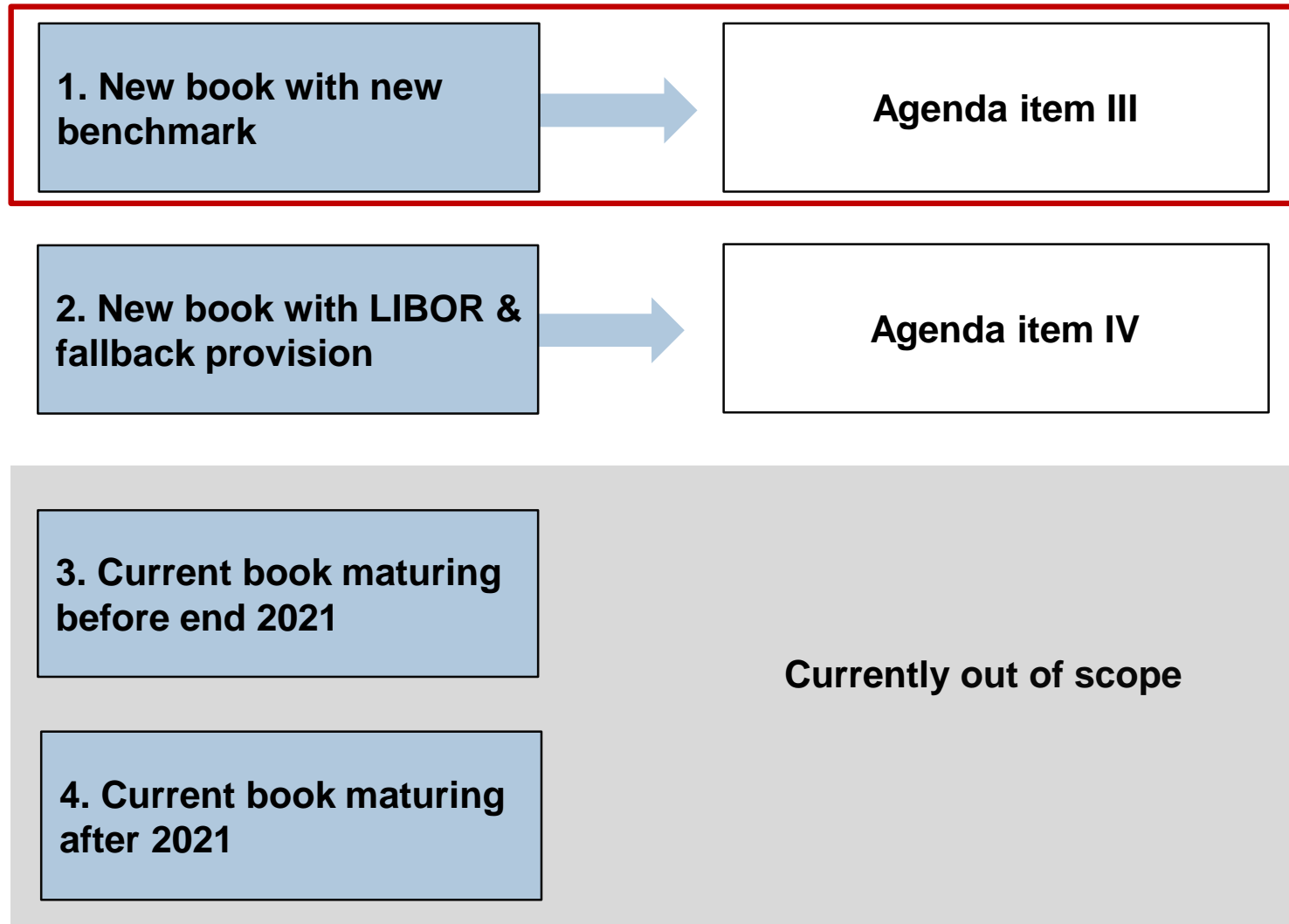
- Development of a SARON ecosystem: standards for forward rate agreements, floating rate notes and options
- Continuation of the work on standards for cross-currency basis swaps (international initiative)

Update from SIX (administrator of SARON)

- EU Benchmark Regulation: Compliance of SARON
- Compounded SARON: SIX envisages daily publication for several maturities (e.g. 1M, 3M, 6M, 9M, 12M and IMM)

III. SARON-based rate as LIBOR alternative

New book with new benchmark – SARON-based term rate



Term rate terminology

Forward-looking term rate

expected sequence of
overnight rates

Cash-
based

e.g. 3M LIBOR

Derivatives-
based

e.g. ICE-fix

Compounded term rate

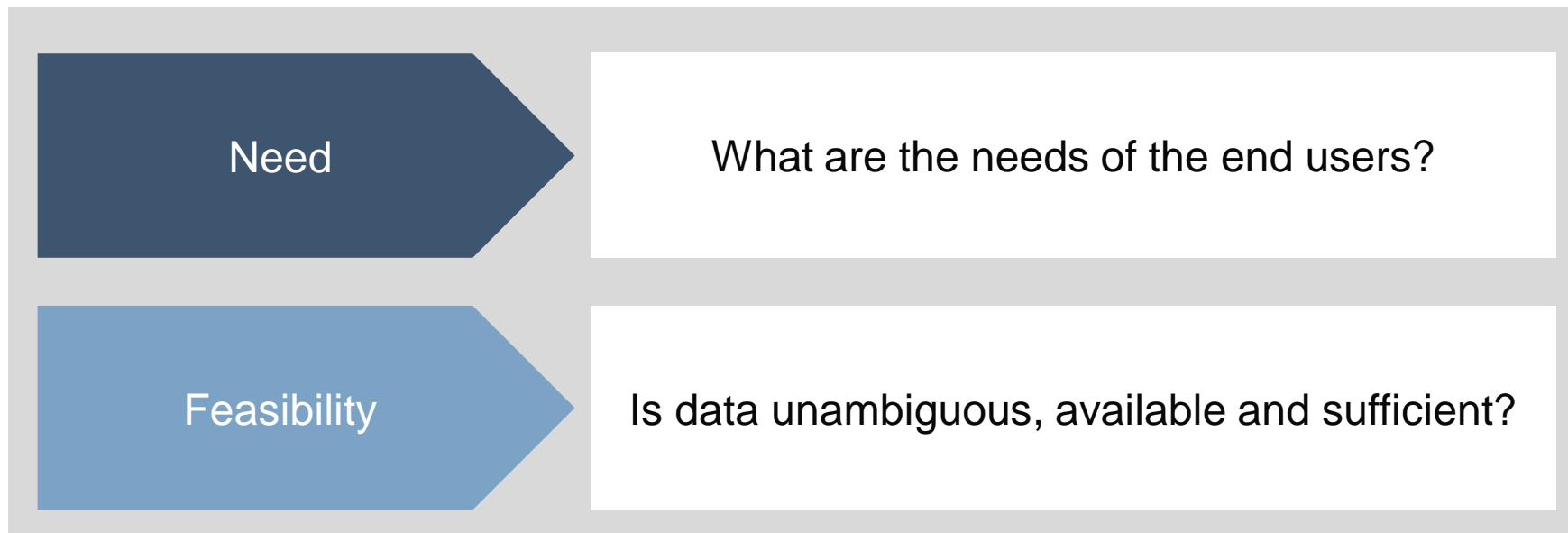
sequence of realized
overnight rates

Compounded
in arrears

Compounded
in advance

Term rate terminology based on FSB (2018)

Key considerations for term rate recommendations

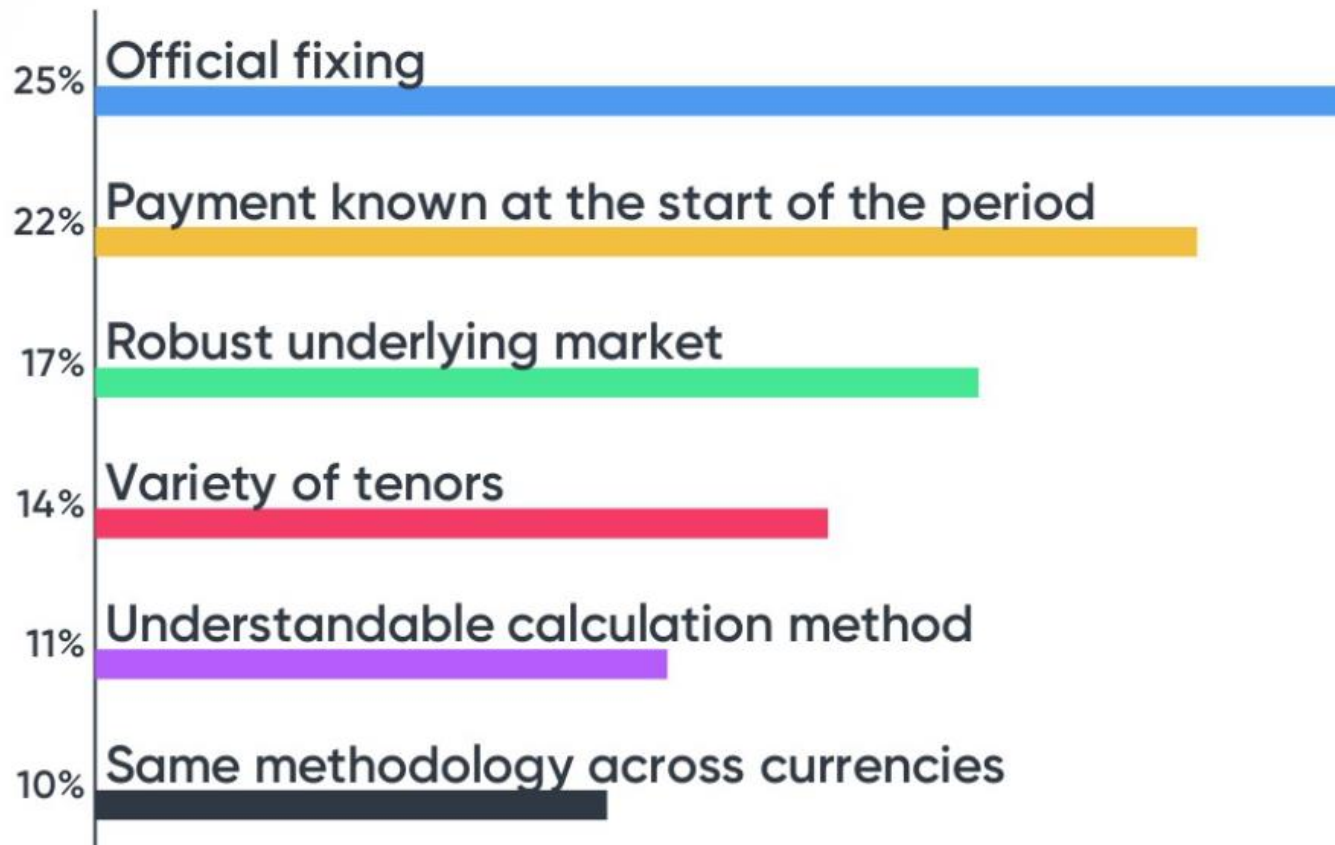


Recommendation regarding a SARON-based term rate as LIBOR alternative

Statement of the Financial Stability Board (July 2018)

Key result from the corporate workshop: a variety of needs indicated by end-users

Important characteristics of a reference rate



Feasibility of term rate approaches

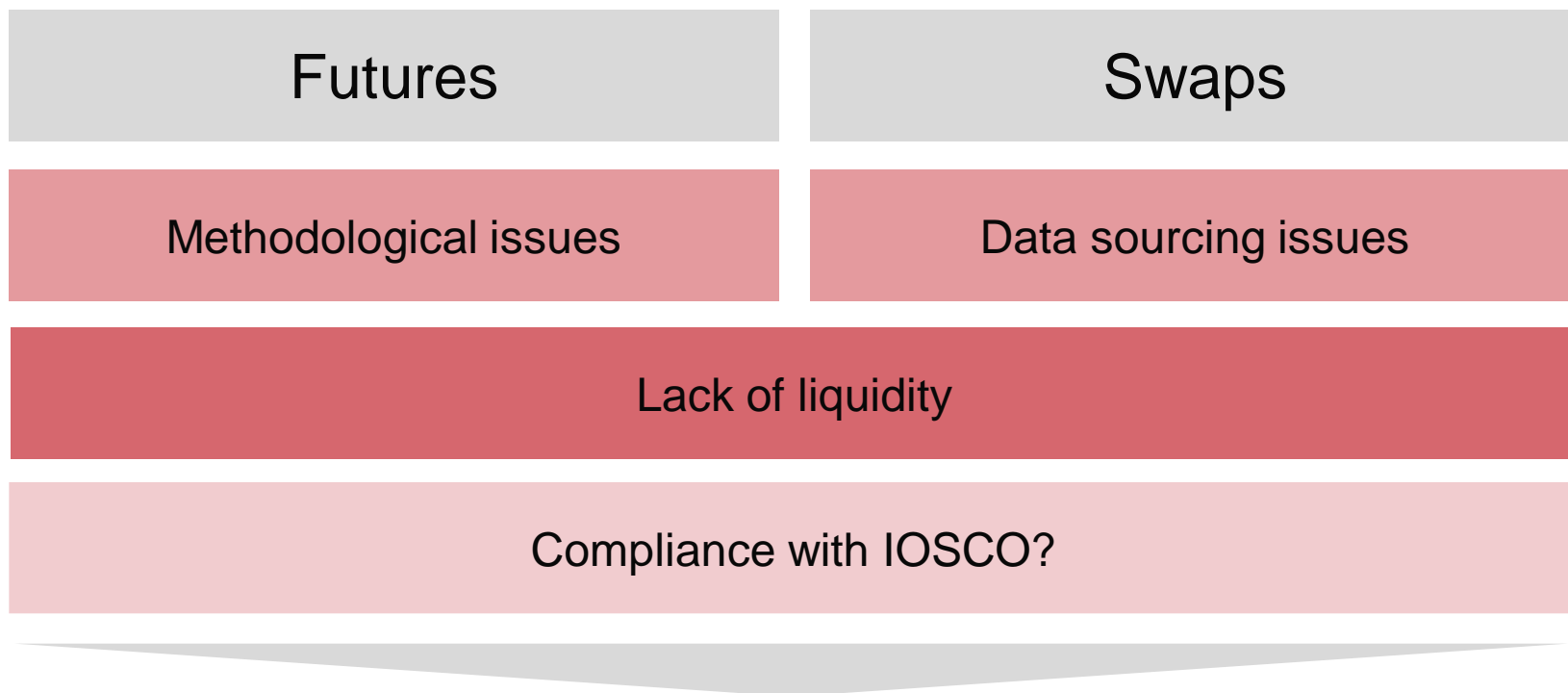
	Daily Volume (Ø 2018)	# Daily Trades (Ø 2018)
SARON (SARON rate volume)	CHF 4'861 mn	46
Compounded term rate:		
Compounded SARON 3M (sum of SARON rate volume over 90 days)	CHF 388'911 mn	4'445
Forward-looking term rate (derivatives-based):		
SARON Futures	Trading as of 29-Oct	Trading as of 29-Oct
SARON Swaps 3M	CHF 221 mn	Less than 1

Note: daily trade volumes reflect notional amounts (single counting)

Source: SNB, Bloomberg, LCH (data as per 16.08.2018)

Proposition: Every forward looking term rate based on derivatives of SARON will not be as robust as the reference rate itself.

Assessment of derivatives-based term rates



→ Robust derivatives-based term rate is not feasible

→ If situation changes, the use as a *fallback* rate might be reassessed

Assessment of derivatives-based term rates is in line with FSB statement on term rates

FSB letter: Interest rate benchmark reform – overnight risk-free rates and term rates [Jul 18]

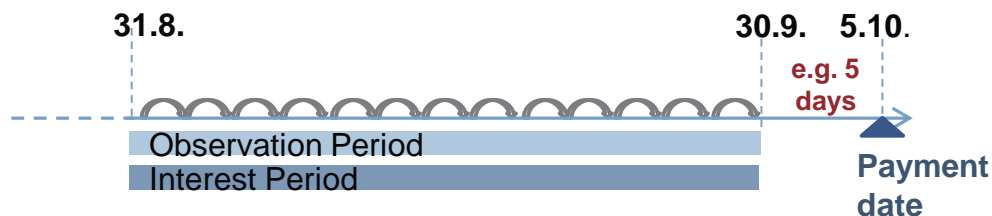
- Transition will only reduce vulnerabilities if it **addresses the core weakness of the IBORs** – the lack of deep and liquid underlying markets.
- The FSB does not expect derivatives-based term rates to be as robust as the reference rates themselves, and they should be used only where necessary.
- In those markets which face the disappearance of the IBORs on which they rely, and in which forward-looking term rates are **not needed**, work to transition away from IBORs at risk of disappearance, **should not**, however, **await progress** on developing these new term rates.

Source: <http://www.fsb.org/wp-content/uploads/P120718.pdf>

There are ways to mitigate cash flow uncertainty

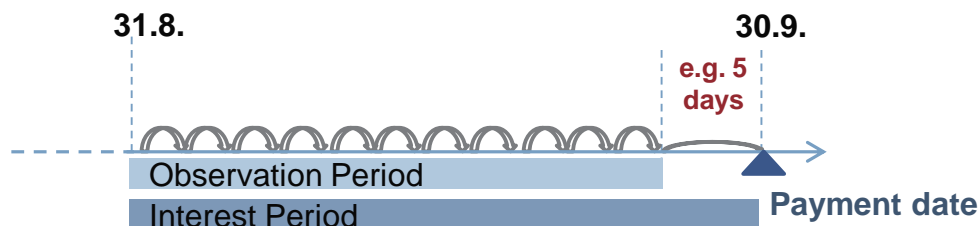
Settlement offset

(SARON compounded in arrears)



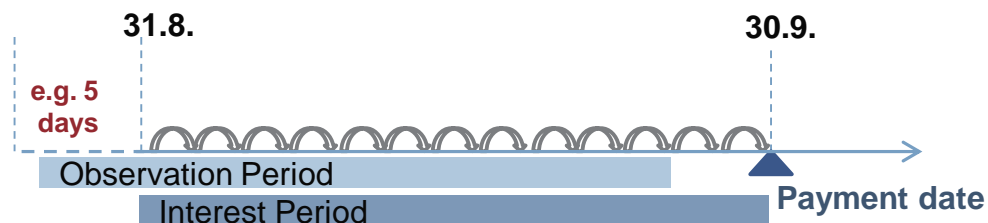
Lockout Period

(SARON compounded in arrears)



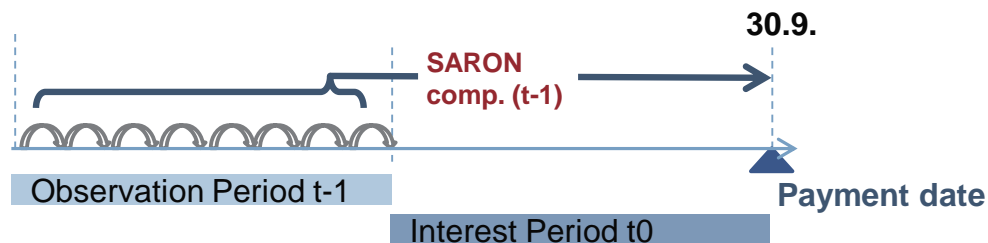
Reset date t-5

(SARON compounded in arrears)



Interest period shift

(SARON compounded in advance)



Alternative measures

- Hedge cash flow uncertainty with SARON swaps/futures/caps.
- Use of fixed rate products.

Recommendation for SARON-based term rate

- It is unlikely that a robust derivatives-based term fixing is feasible.
- NWG recommends using a compounded SARON wherever possible.
- There are ways to mitigate or solve cash flow uncertainty.

Based on feasibility and end users' needs:

Robustness: Every term rate based on derivatives will not be as robust as the reference rate itself; If situation changes, the use as a fallback rate might be reassessed.

Official fixing: Acceptable methodology and compliance with benchmark regulation unlikely for a CHF derivatives-based term fixing.

Payment known: A compounded term rate doesn't exclude per se an ex-ante knowledge of the next cash flow.

Next steps

Methods of mitigating or solving cash flow uncertainty

- Spell out solutions how uncertainty about cash flows can be addressed

Onboard infrastructure providers

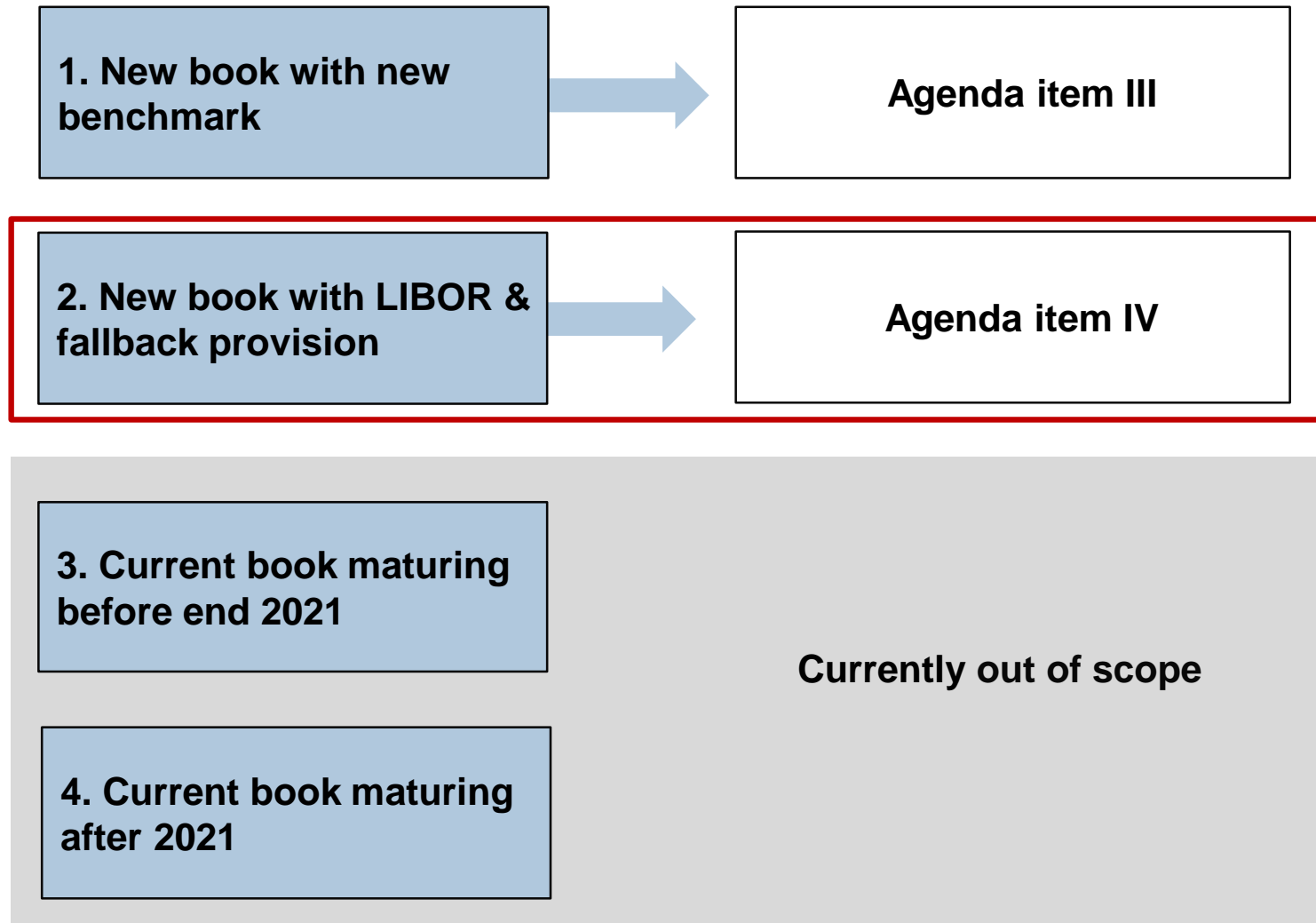
- Raise awareness and assess capability of infrastructure providers to cope with compounded SARON

Hedge accounting

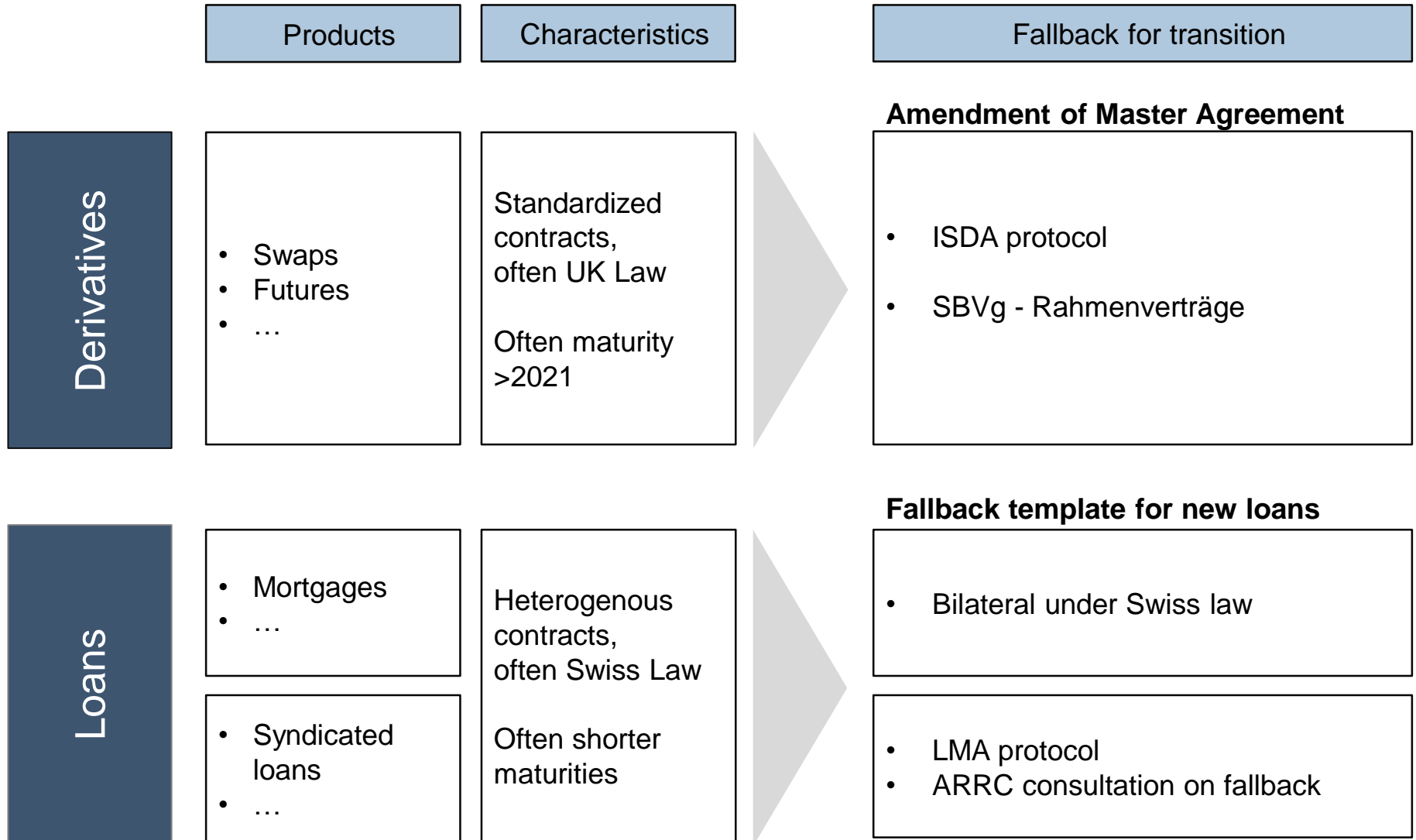
- Evaluation of cash flow hedging techniques and their effectiveness in accounting

IV. Fallback language

New book with LIBOR & fallback provision



Distinction between fallbacks for loans and derivatives



Presentation of draft fallback template for CHF loans (Homburger)

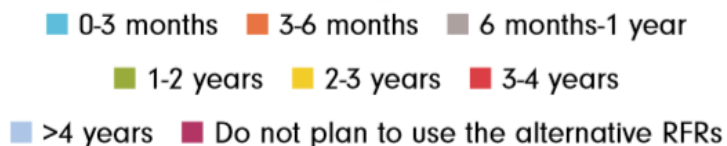
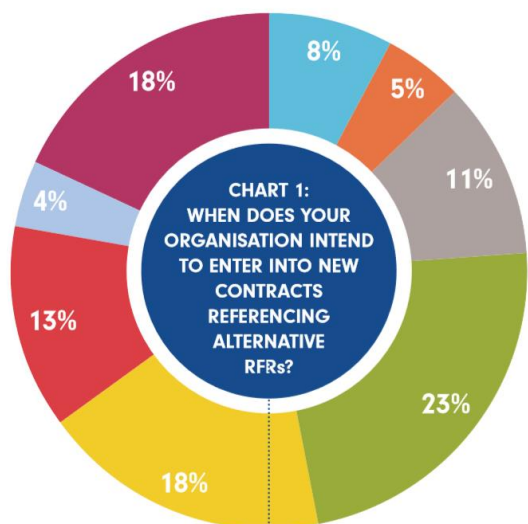
Please find the slides [here](#).

V. Operational readiness

Prevailing gap between awareness and concrete steps

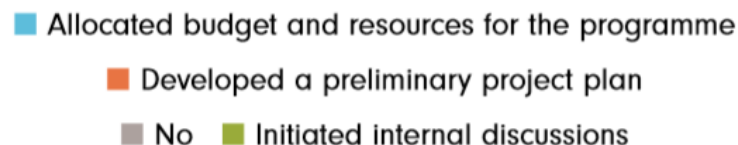
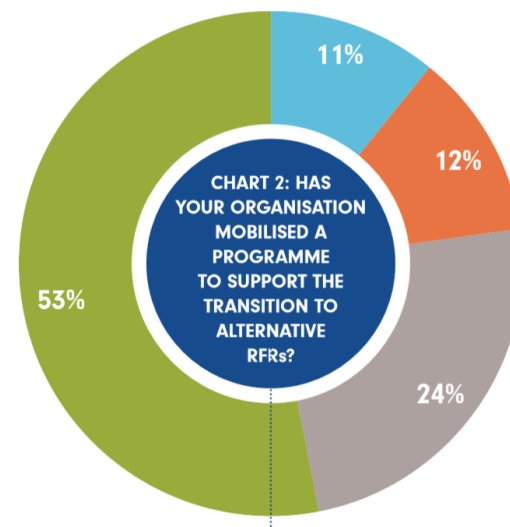
Awareness relatively high:

78% of respondents intend to adopt alternative RFR's within the next 4 years



Preparations still at an infant stage:

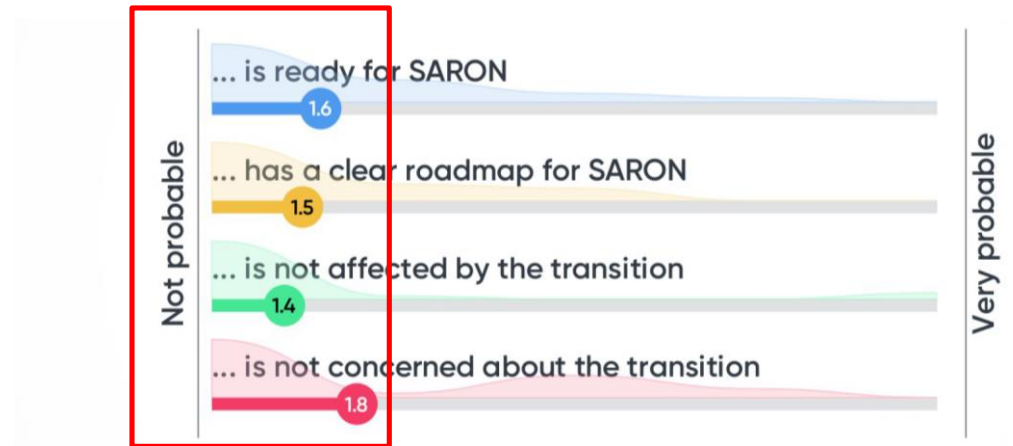
Only 23% of respondents have allocated budget or developed a preliminary project plan



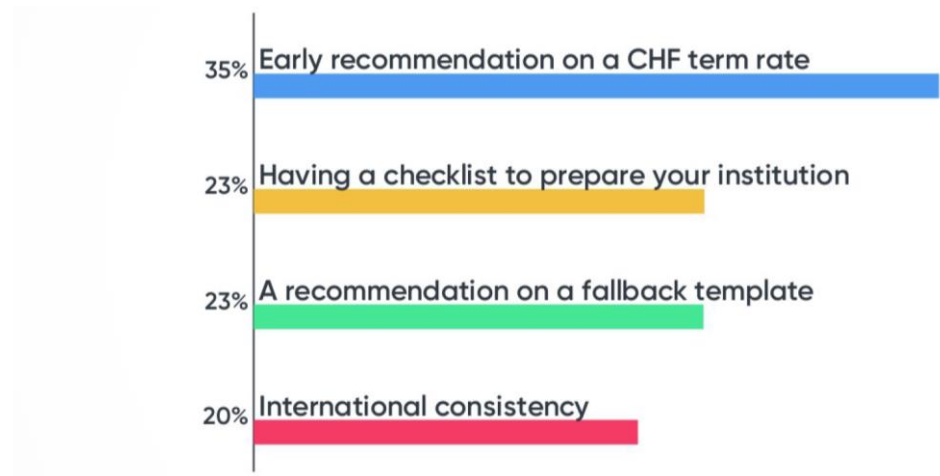
Source: ISDA Quarterly August 2018

Results from the corporate workshop

My institution...



What are the most important elements of a transition?



International update

FCA/PRA letter to CEOs of UK banks and insurance companies asking for their preparations and actions directed at managing the transition to alternative rates [Sep 18]



BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY



FINANCIAL
CONDUCT
AUTHORITY

David Rule
Executive Director,
Insurance Supervision

Megan Butler
Executive Director of
Supervision,
Investment, Wholesale
and Specialists Division

Jonathan Davidson
Executive Director of
Supervision,
Retail and Authorisations
Division

Prudential Regulation Authority
20 Moorgate
London EC2R 6DA

Financial Conduct Authority
12 Endeavour Square
London E20 1JN

19 September 2018

Dear CEO

Firms' preparations for transition from LIBOR to risk-free rates

1. The Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA) are writing to the CEOs of large banks and insurance companies¹ regarding the ongoing global benchmark reform effort mandated by the Financial Stability Board (FSB), specifically the transition from LIBOR to alternative rates. As you know, this effort is driven in the UK by the Financial Policy Committee (FPC), the Bank of England (Bank), and the FCA. **The purpose of this letter is to seek assurance that firms' senior managers and boards understand the risks associated with this transition and are taking appropriate action now so that your firm can transition to alternative rates ahead of end-2021.**

Checklist to support market participants becoming operationally ready for the LIBOR transition

National Working Group on CHF Reference Interest Rates

Publication date

Checklist: Operational Readiness

The purpose of this document is to support users of LIBOR rates in achieving operational readiness for a transition away from LIBOR to the alternative risk-free reference rates (RFRs, e.g. SARON). To facilitate the preparation for the transition, the National Working Group on CHF Reference Interest Rates (NWG) suggests working through this document, as well as consulting ISDA's 'IBOR Global Benchmark Transition Report', June 2018 ([Link](#)).

This document provides a checklist with a broad overview of possible work tasks associated with a LIBOR transition and products/contracts that will potentially be affected. Checklist users should identify tasks (in combination with the respective product/contracts) are relevant for their own institution and prioritise them accordingly. Please keep in mind that products and contracts could either have a direct LIBOR reference or could be affected indirectly via an implicit LIBOR pricing mechanism. The checklist is followed by a template that could serve to monitor the LIBOR transition.

Given the heterogeneous nature of the market, the NWG would like to draw attention to the fact that the information provided is not exhaustive and detailed internal analyses are necessary.

Suggestions on how to improve this checklist are highly welcome. Please contact nwg@snb.ch.

- Publication on the NWG's website
- NWG Tour de Table to continuously identify blind spots in the transition and to monitor transition progress

VI. Recommendations

Decisions and recommendations

NWG decisions:

- Publication of “Operational Readiness Checklist”, feedback welcome to nwg@snb.ch

NWG recommendations to all market participants:

- SARON-based term rate
 - It is unlikely that a robust derivatives-based term fixing is feasible.
 - NWG recommends using a compounded SARON wherever possible.
 - There are ways to mitigate or solve cash flow uncertainty.
- Operational readiness
 - Prepare for an expected transition to compounded SARON
 - Get transparency on current volumes, currencies and maturity profile of existing book (e.g. loans, derivatives)
 - Get high-level understanding of technical implications and time-to-market
 - Raise awareness on senior management level
 - Start transacting in the new derivatives markets referencing SARON
- Contractual robustness
 - Review / adapt new loan and deposit contracts with regard to a permanent LIBOR discontinuation
 - Engage with ISDA in order to be kept abreast of new developments as well as to offer constructive feedback

VII. Next steps

Next steps

Items to be addressed in sub-working groups:

- Development of a SARON ecosystem: standards for forward rate agreements, floating rate notes and options
- Continuation of the work on standards for cross-currency basis swaps (international initiative)
- Spell out solutions how uncertainty about cash flows can be addressed
- Raise awareness and assess capability of infrastructure providers to cope with compounded SARON
- Evaluation of cash flow hedging techniques and their effectiveness in accounting

The following items are targeted at the next NWG meeting:

- Options on how to use a compounded SARON
- Report progress on transition to SARON (e.g. accounting issues and awareness among infrastructure providers)