
Workshop on the implications of a transition from Swiss franc LIBOR to SARON for corporates

17 September 2018

Introduction

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Co-chair of the National Working Group on Swiss Franc
Reference Rates (NWG)
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Agenda of today's workshop

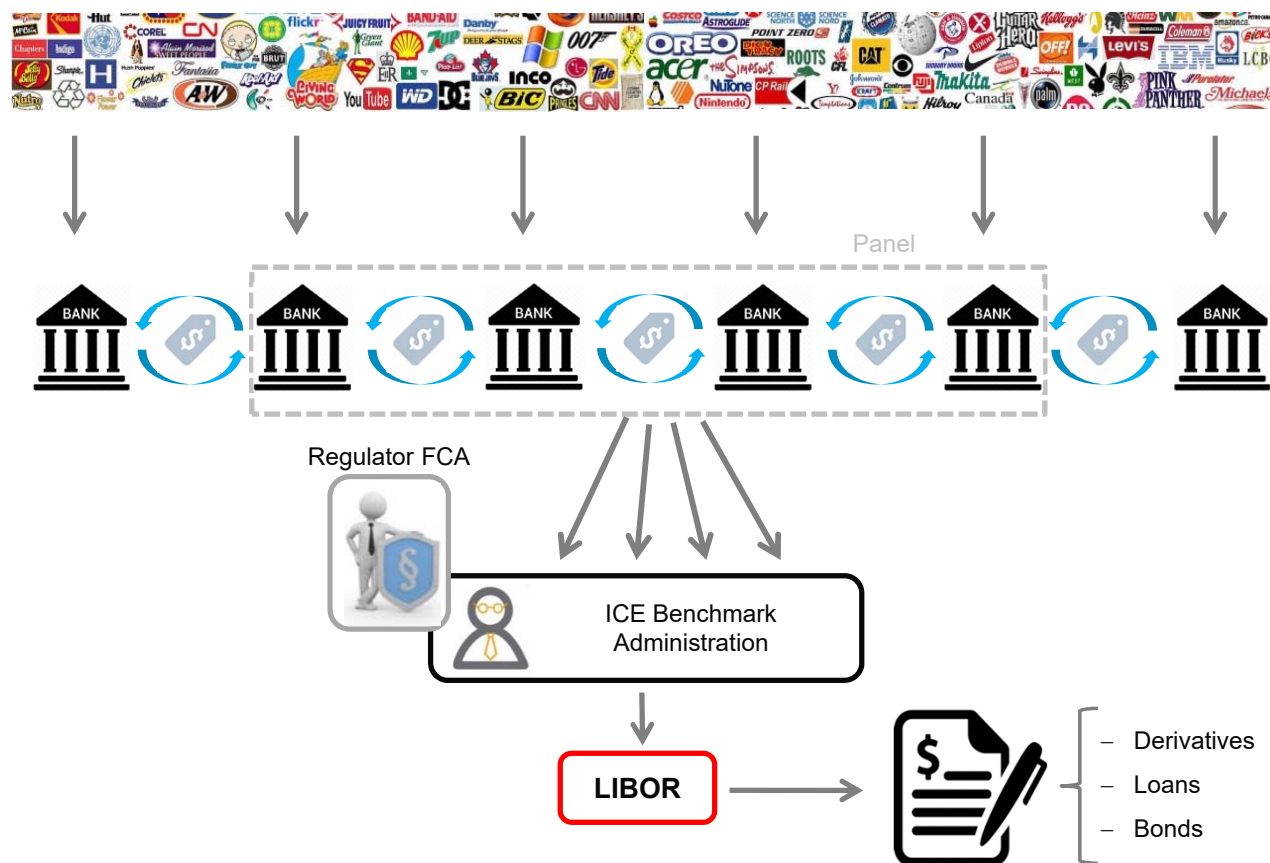
1. Current use of LIBOR Where and how do corporates rely on LIBOR?
2. Term fixing Cash-based or Derivatives-based?
3. Transitional issues What are next steps, end user's key concerns and duration of implementation?

The purpose of benchmarks

A benchmark is a price index that aims to **reflect underlying market conditions...**

...creating **price transparency...**

...and enabling **usage** in financial contracts (such as loans or derivative contracts).



How LIBOR became the dominant benchmark rate: The interplay of price discovery and hedging



LIBOR used for pricing in capital markets

- Bonds (primary and secondary market)
- Loans (esp. mortgages)

LIBOR used for hedging (derivatives)

- Volume of Libor denoted derivatives estimated at CHF 6 tn.

The long road of LIBOR reforms

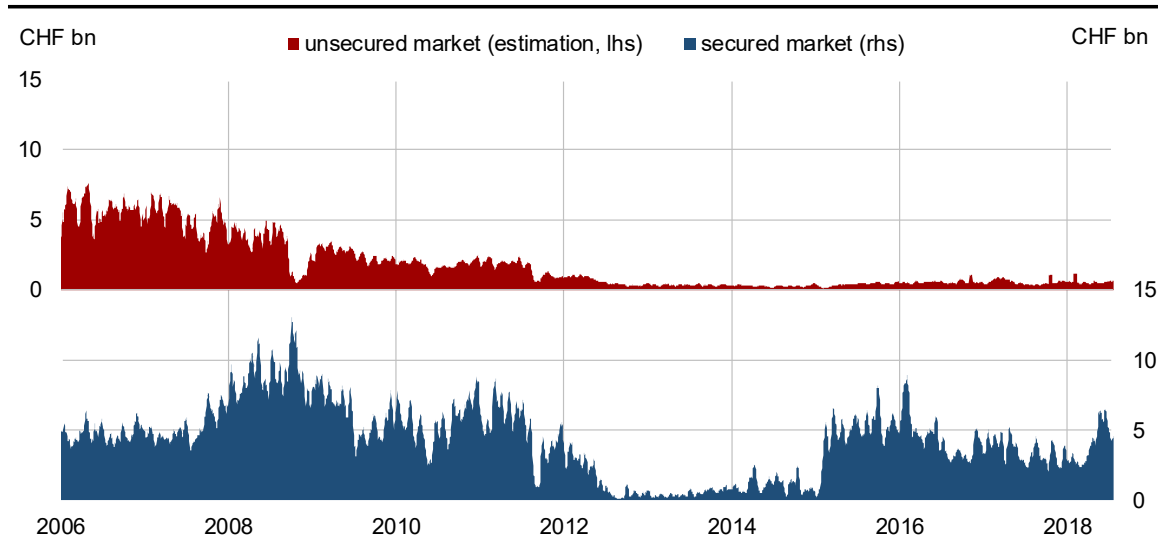


Source: SNB

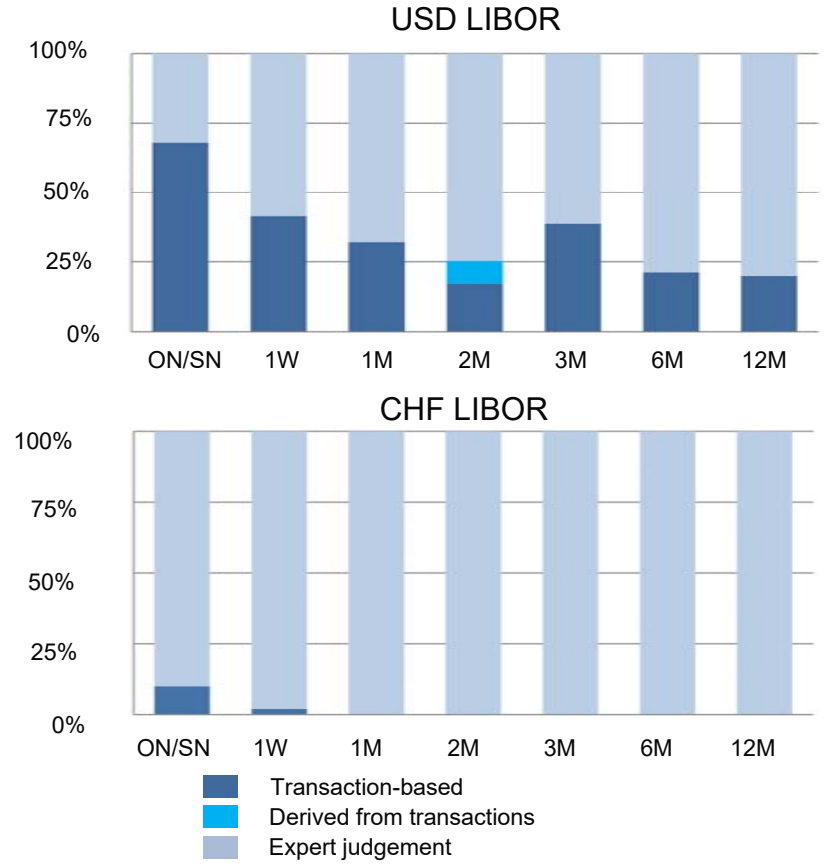
The core problem of LIBOR: «no underlying market»

SHIFT FROM THE UNSECURED TO SECURED MONEY MARKET

14-day moving average; turnover day-to-day money



Sources: SNB, SIC, SSX

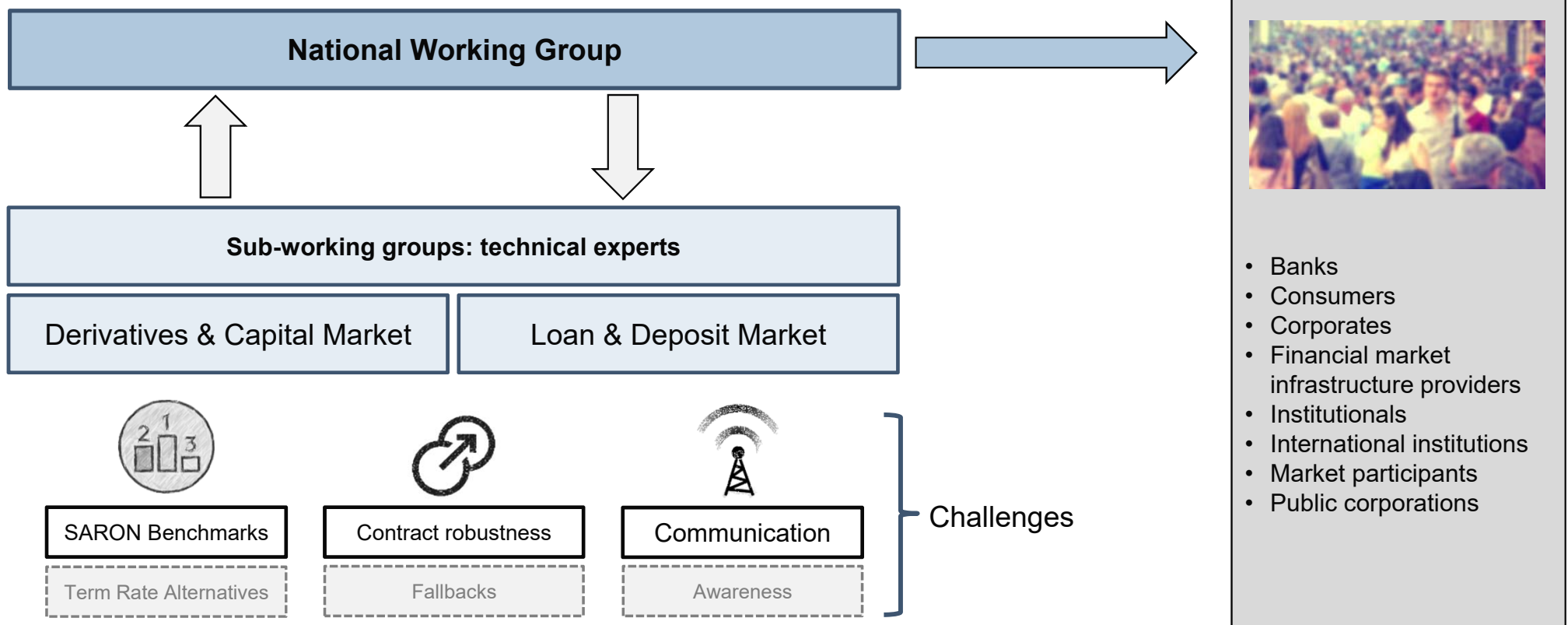


Source: IBA weekly reports, 16 – 20 April 2018

The future availability of LIBOR is highly uncertain



National Working Group on CHF Reference Rates, inclusion of relevant stakeholders



Structure of the first group discussion

1. Importance of CHF LIBOR for various products and purposes
2. Usage of CHF LIBOR
3. Open Questions

Go to **www.mentimeter.com** and use the code **16 42 61**

How to construct a SARON-based term rate?

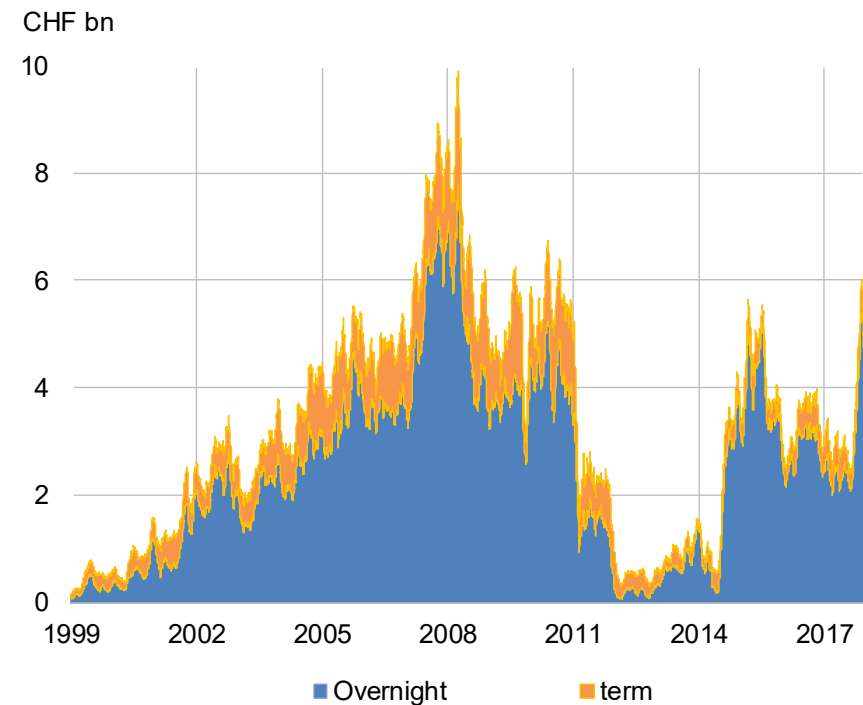
Otto Huber
Chair of Derivatives and Capital Market Sub-Group
Credit Suisse

SARON – Swiss Average Rate Overnight

	SARON
Basis	<ul style="list-style-type: none"> • CHF Repo • Overnight tenor • Transactions and quotes • SNB GC Basket • 150 market participants
Design	Collaboration between the SNB and SIX Swiss Exchange in 2009
Calculation	<ul style="list-style-type: none"> • Volume-weighted rate • Quote filter
Fixing times	12 noon, 4 pm and 6 pm (the 6 pm fixing is relevant for swaps)
Bloomberg & Reuters tickers	SSARON/SARON.S

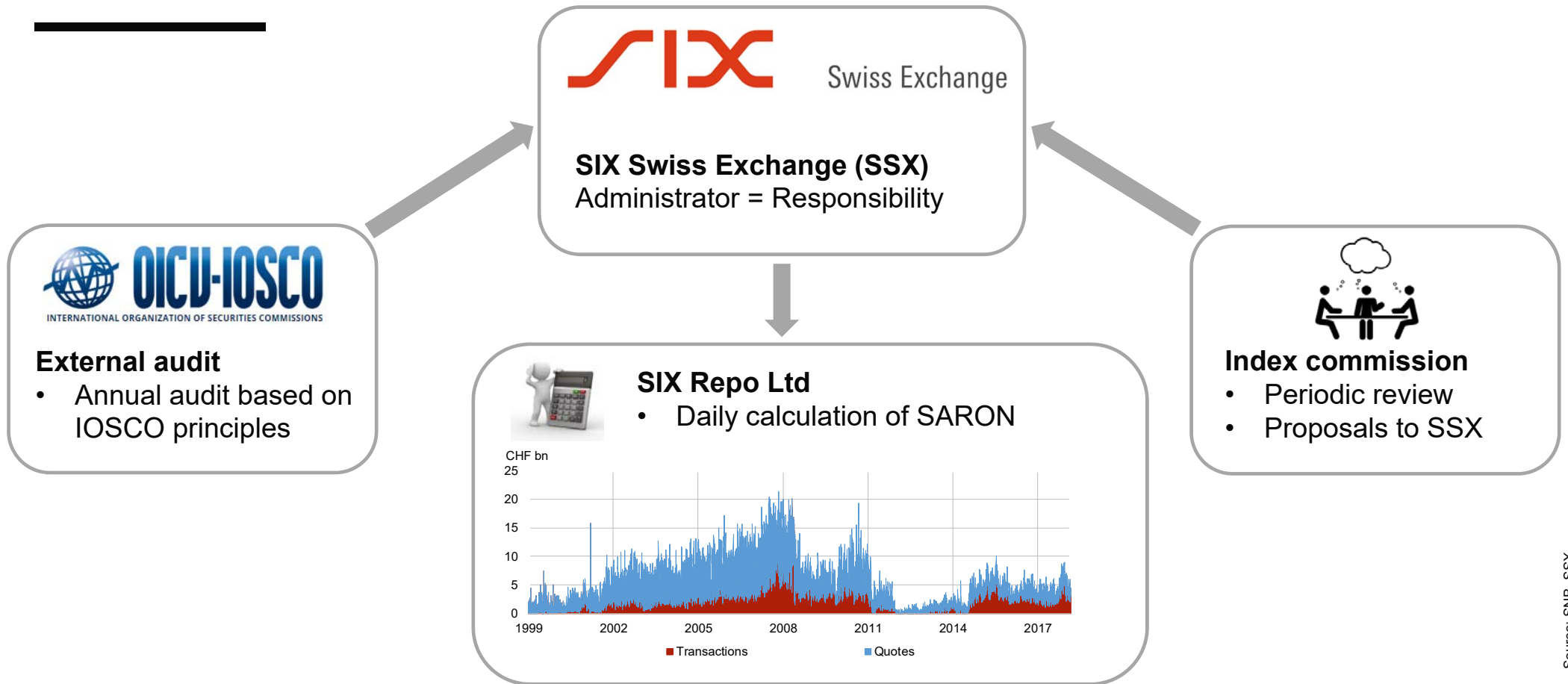
OVERNIGHT TENOR MOST LIQUID

average daily turnover (last 30 days)



Source: SNB, SSX

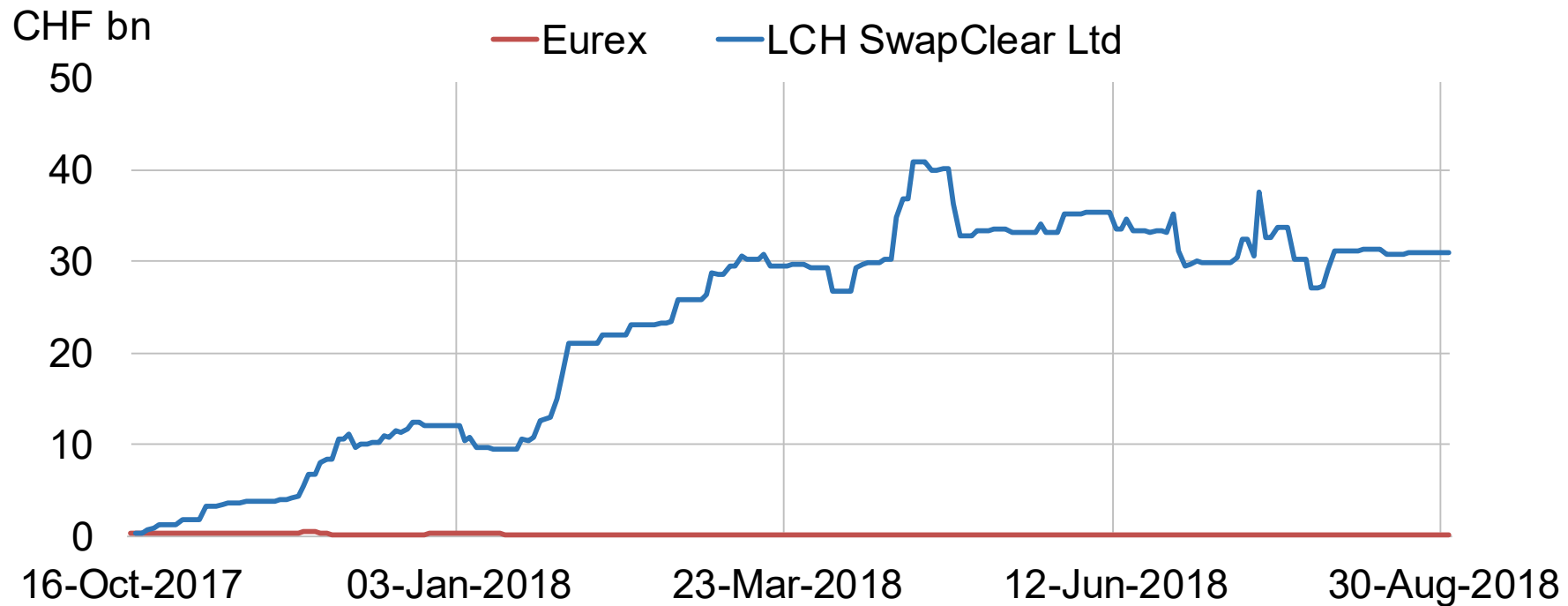
Governance structure of the Swiss reference rates



Source: SNB, SSX

New CHF curve – development of the cleared SARON swap market

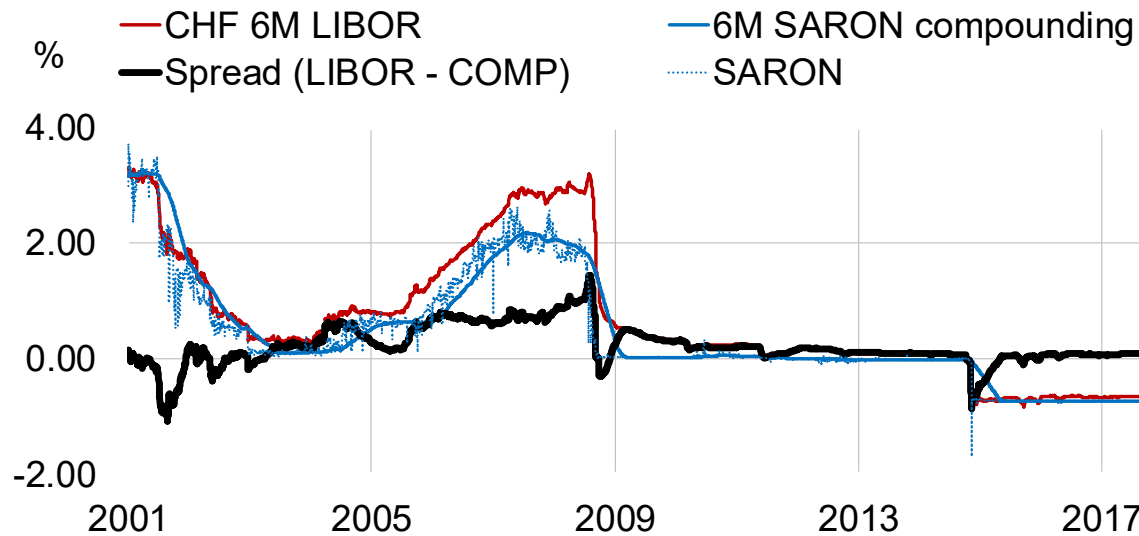
Open Interest (single counting, all tenors)



Sources: SNB, Clarus

What is the difference between SARON and LIBOR?

	SARON	LIBOR
Basis	Transactions (of most liquid market)	Estimated interbank funding costs of panel banks ¹⁾
Term premium	Overnight rate	Forward-looking, term rate (e.g. 1M, 3M, 6M)
Credit risk premium	Risk-free, collateralised	Credit risk of banks



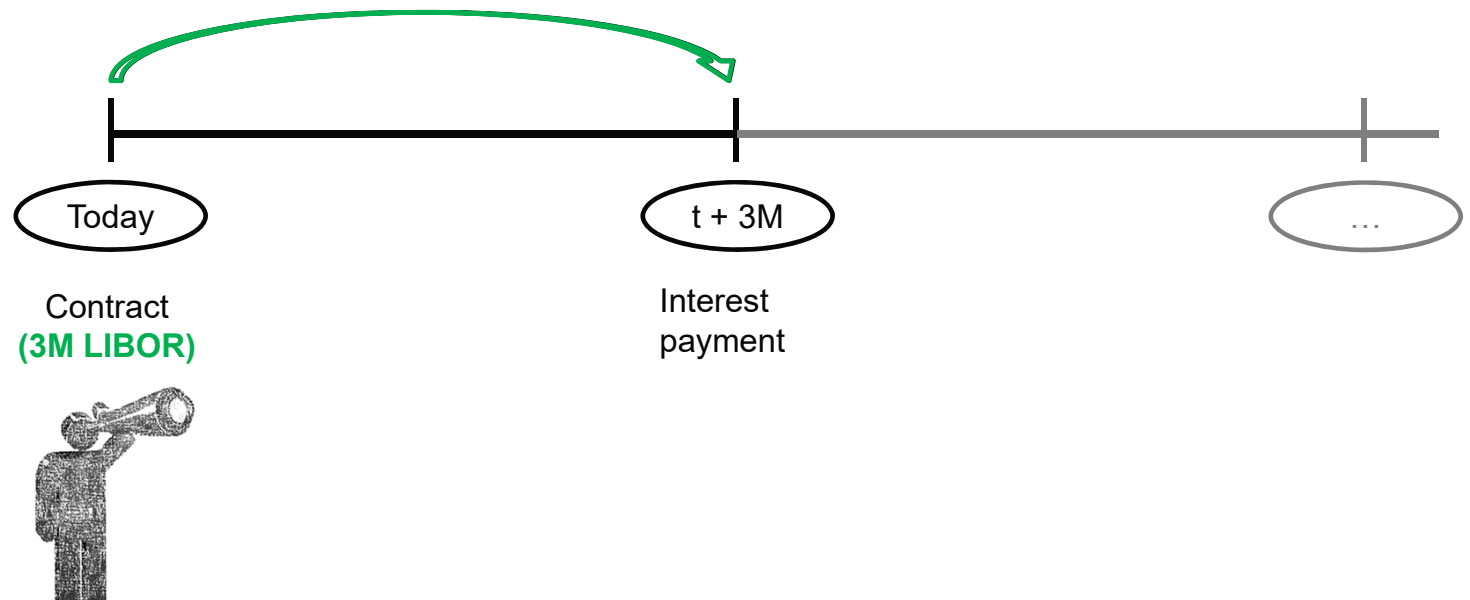
¹⁾ "At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 am?"

Spread between SARON and CHF 6M LIBOR.

Sources: SNB, Bloomberg

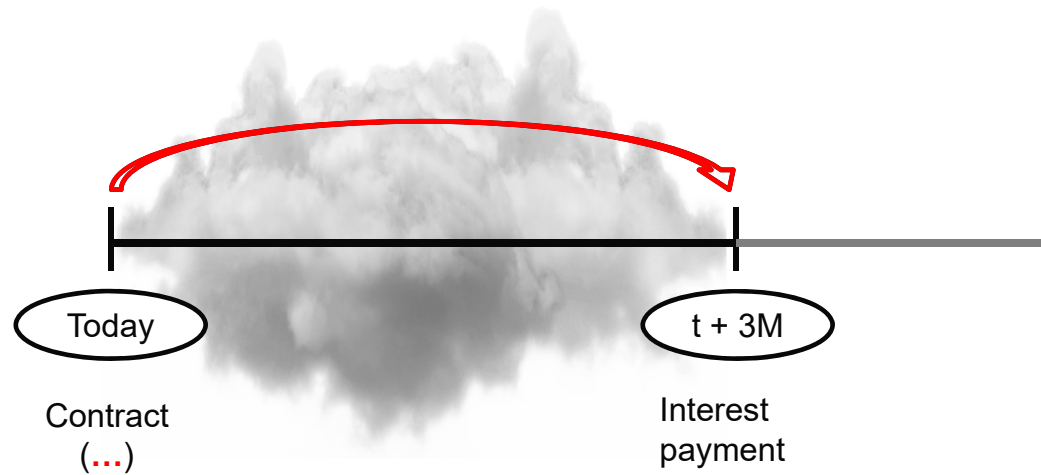
With LIBOR: Interest payment known at the beginning of the period

Forward-looking



- The sum to be paid in three months is known today

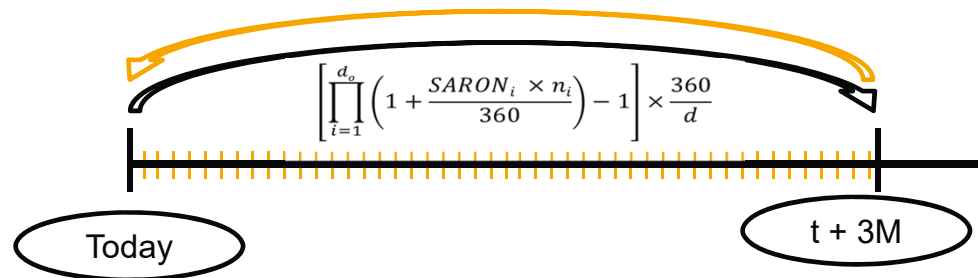
Without LIBOR: there is no term rate fixing yet



- The alternative to CHF LIBOR – *SARON* – is an Overnight rate

1. Possible solution – Compounding

Backward-looking
compounded SARON



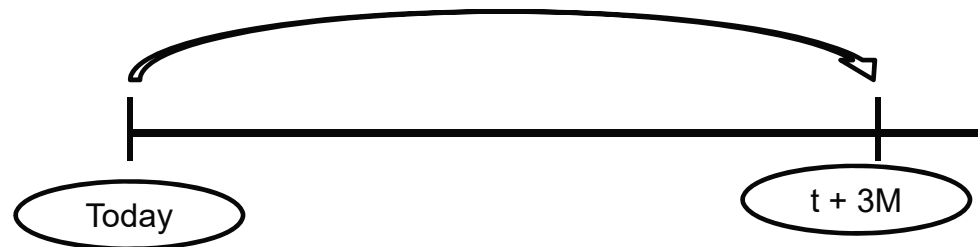
Interest payment not
known at the beginning



Robust Fixing

2. Possible solution – Based on derivatives market

Forward-looking,
Derivatives market



Interest payment is
known at the
beginning



Liquidity of
underlying market
limited

For cash-products: Solution for the SARON-based term rate?

Compounded SARON fixing

- **Uncertainty** about interest payment
- Uncertainty decreases over period
- Liquid and **robust** market
- **Same fixing** as in derivatives market
- **Governance** in place



Based on derivatives market

- **Certainty** about interest payment
- Liquidity of underlying market **limited**
- Likely **not a robust** fixing
- **Not yet available**

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

There is a trade-off between robustness and forward-looking.

Structure of the second group discussion

1. Most important characteristics of a reference rate
2. Compatibility of a compounded rate for certain products and purposes
3. Are two term rates necessary or does a compounded rate suffice?
4. Open Questions

Appendix

Floating Rate Bonds Referencing on RFRs

Issuer	ISIN	Issue Date	Pricing	Interest Rate Determination	Tenor	Size	Coupon	Reset Date	Lock-out
European Investment Bank	XS1848770407	29 June 2018	SONIA+35bps	Compounded	5Y	GBP 1 bn	Quarterly	t-5	N/A
Fannie Mae	US3136G4TF09	30 July 2018	SOFRA+8bps	Average	6M	USD 2.5 bn	Quarterly	t-1	4 days
	US3136G4TG81		SOFRA+12bps		12M	USD 2.0 bn			
	US3136G4TH64		SOFRA+16bps		18M	USD 1.5 bn			
World Bank	US459058GK33	21 August 2018	SOFRA+22bps	Average	2Y	USD 1 bn	Quarterly	t-1	4 days
Credit Suisse	US22549LMA07	20 August 2018	SOFRA+35bps		6M	USD 100 mn	Monthly	t-1	N/A
Barclays		24 August 2018	SOFRA+???			USD 525 mn			
MeLlife		31 August 2018	SOFRA+57bps	Average	2Y	USD 1 bn	Quarterly	t-1	4 days
Lloyds Banking Group	XS1878123303	5 September 2018	SONIA+43bps	Compounded	3Y	GBP 750 mn	Quarterly	t-5	N/A

Underlying Markets for 3M CHF Rates

	Daily Volume (Ø 2018)	# Daily Trades (Ø 2018)	Days in 2018 w/o trades
Cash flow approach:			
Compounded SARON 3M <small>(Sum of SARON rate volume over 90 days)</small>	CHF 388'911 mn	2'800	0
Term rate approach:			
SARON Futures	N/A	N/A	N/A
SARON Swaps 3M	CHF 443 mn	Less than 1	N/A

Note: daily volumes for term rate approaches reflect notional amounts (double counting)

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

Transition from CHF LIBOR to SARON

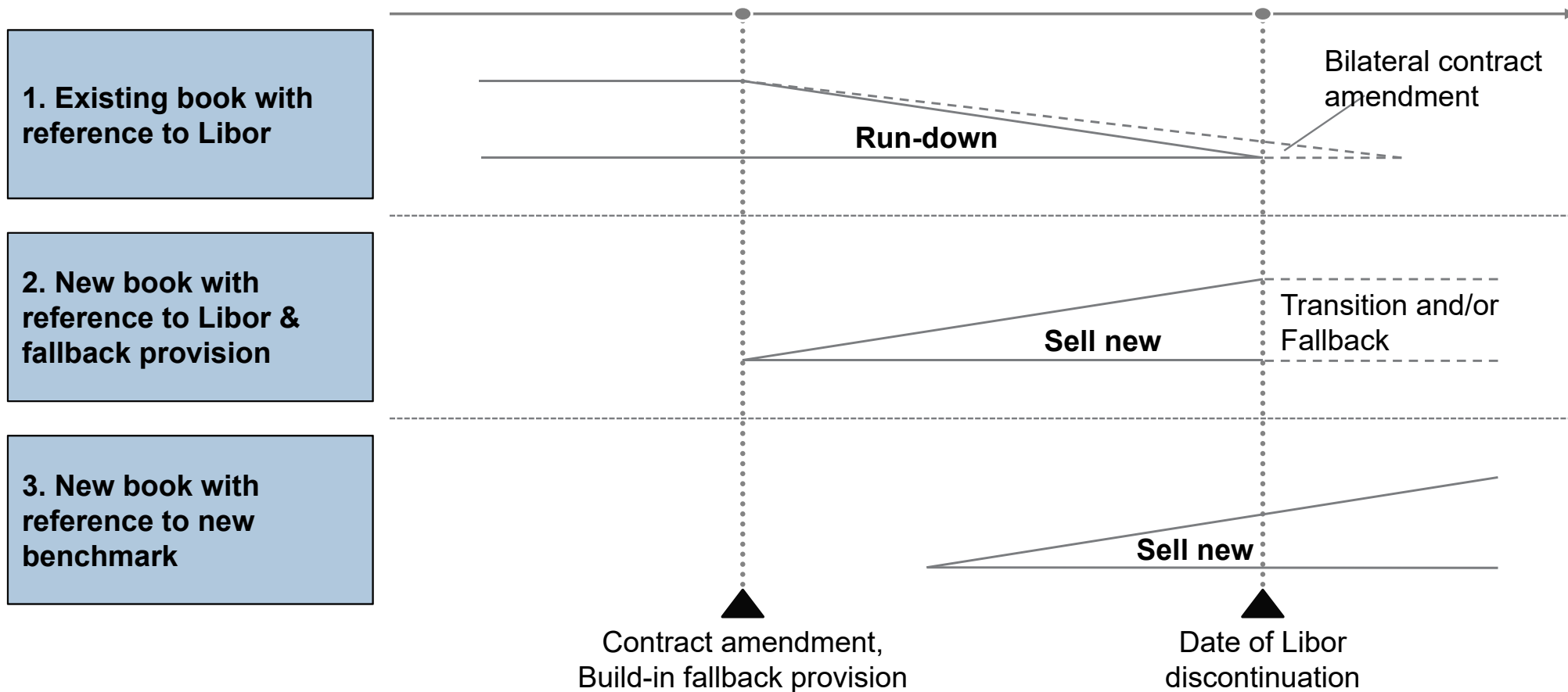
Alfred Ledermann
Chair of Loan and Deposit Market Sub-Group
UBS

Transition scenarios across markets

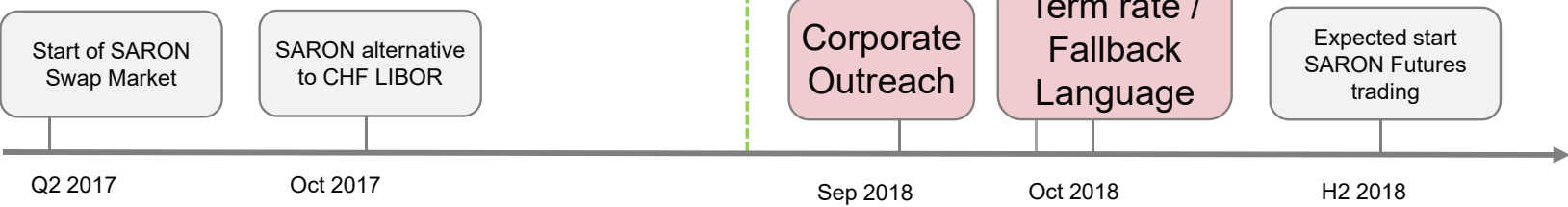
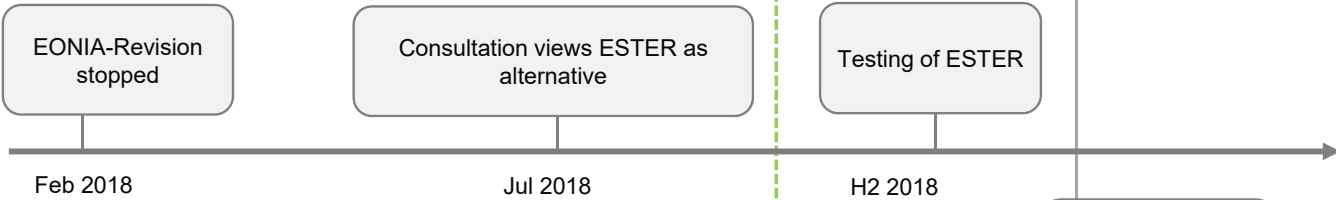
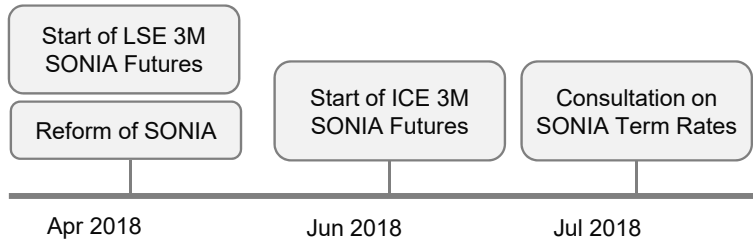
	Products	Characteristics	Transition	Fallback
Derivatives markets	<ul style="list-style-type: none"> • IRS (LIBOR-based) • Futures ... 	<ul style="list-style-type: none"> • Large volumes • Highly standardized contracts 	<ul style="list-style-type: none"> • Large part goes beyond 2021 ➤ Amending existing contracts 	<ul style="list-style-type: none"> • ISDA is developing protocols
Cash markets	<ul style="list-style-type: none"> • Retail mortgages • Corporate loans • Structured lending • ... 	<ul style="list-style-type: none"> • Large volumes • Highly different contracts and counterparties 	<ul style="list-style-type: none"> • Mostly short tenors ➤ New contracts with fallbacks 	<ul style="list-style-type: none"> • Fallback template by NWG • Possibly different: <ul style="list-style-type: none"> ○ across jurisdictions ○ compared to derivatives

Transition scenarios for cash products

ILLUSTRATIVE
ONLY

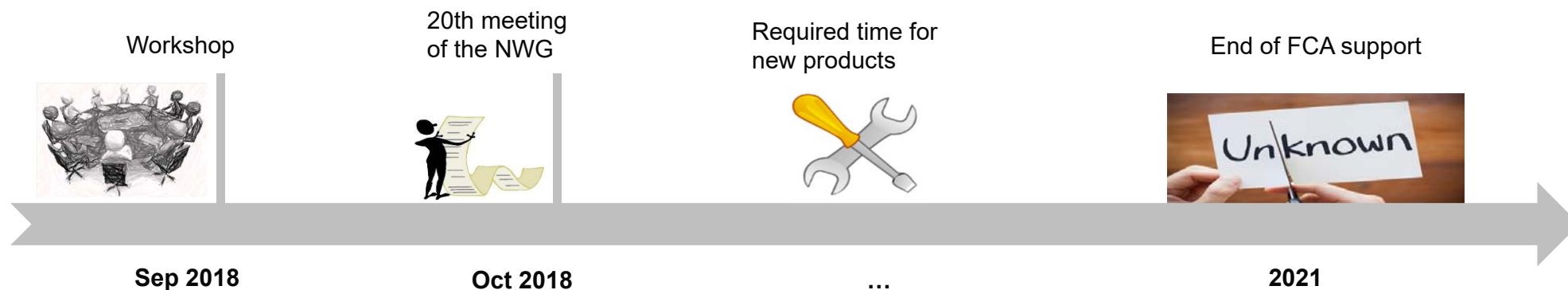


International timelines



ISDA Consultation on Spread and Term Adjustments

Guidance by the NWG – outlook



Possible recommendations at the NWG Meeting this October

- SARON-based term rate
 - Fallback Template for CHF loans
 - Checklist for the transition
- Further guidance will be provided in the course of the transition
- Feedback is welcome (nwg@snb.ch)

How can a corporate prepare itself?

- ✓ Raise **awareness** on senior management level
- ✓ Define **budget and responsibility** for a transition program
- ✓ Consider **recommendations** e.g. by NWG
- ✓ **Review** current exposure and fallback language
- ✓ **Communicate** with affected counterparties
- ✓ Internal **approval** for new products
- ✓ Adjustments of **IT-systems**

→ **The planning and the transition must now begin**

Structure of the third group discussion

1. How much time do corporates need for the transition?
2. What are important elements for the transition and for triggers?
3. How prepared are corporates up to now?
4. Open Questions