

Presentation till Svenska Bankföreningens medlemmar The Evolution of STIBOR

February 17, 2022

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The Evolution of STIBOR

BACKGROUND



Revised STIBOR calculation methodology Benchmark Regulation (BMR) - Requirements

- To anchor methodology to transactional data, to the greatest extent possible
- To limit the application of expert judgement to the greatest extent possible
- To ensure verification and traceability of input data
- To reflect the underlying economic reality
- **To produce and provide** a reliable and robust benchmark

The Evolution of STIBOR

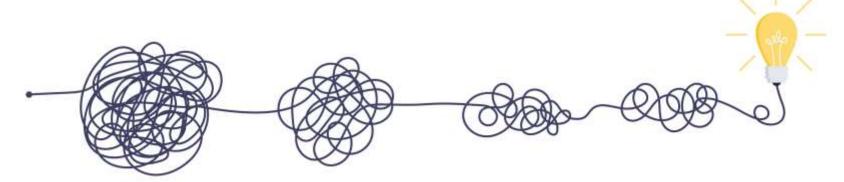
REVISED CALCULATION METHODOLOGY

Revised STIBOR calculation methodology Input Data Waterfall

Level 1 Contributions based on transactions executed by the Level 2 Panel Bank during the previous business day, that reflect the Contributions derived from the Panel Bank's cost of funds. evidence of Level 1 Level 3 transactions, using interpolation, extrapolation, Contributions based on CP/CD and the application of a Market issuance prices using data Adjustment Factor (MAF). **BOS** through the application of a combination of modelling The final step addresses techniques and the Panel differences in value by adding a Bank's judgement. 'Bid to Offer Spread' (BOS), effectively moving the calculated COF rate to that of a 'lending rate.

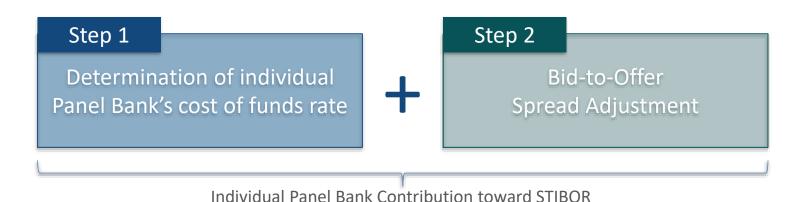
Revised STIBOR calculation methodology Initial concerns ahead of the revision of STIBOR

- Market features
- Bid rate or Offered rate
- Resolution Fund / Bank Tax
- Time frame Challenges



Revised STIBOR calculation methodology

The calculation process of a Panel Bank's contribution toward STIBOR is divided into two distinct steps:



- **Step 1** A measure of the contributing bank's cost of funds calculated by means of an Input Data priority waterfall;
- **Step 2** A Bid to Offer Spread is added to the Panel Bank's cost of fund. This is done to create a lending rate aligned with the definition of STIBOR.

Revised STIBOR calculation methodology Definition of STIBOR

"STIBOR is a measure of the interest rate applied by panel banks for unsecured lending in Swedish krona (SEK) to leading banks."

"STIBOR is a reference rate that shows an average of the interest rates at which a Panel Banks active on the Swedish Money Market are willing to lend to one another without collateral at different maturities.

STIBOR is set for tomorrow next, 1 week and 1, 2, 3 and 6 months".



Revised STIBOR calculation methodology Waterfall Methodology

A Panel Bank's contribution is determined as the 'highest level method available' – 'waterfall' approach.

Level 1 Contribution

L1 Contribution for day T+1 is calculated as 'VWAP' of all eligible transactions from day T (plain vanilla fixed term) subdivided into two sublevels

- L1.1 SEK denominated unsecured Deposits and short-term primary CD/CP issuances
- L1.2 FCY denominated (EUR, GBP and USD) short term primary CD/CP issuances

Level 2 Contribution

Formulaic approach subdivided into three different sublevels

- L2.1 Adjusted linear interpolation from neighboring tenors (applied for 1W, 1M, 2M and 3M) using Spread Adjustment Factor (SAF)
- L2.2 Off-Tenor transaction (maturity > 1W and < 6M). Volume is split based on weights, in case of FCY CD/CP, volume is transformed to SEK using FCYSEK spot rate and then split
- L2.3 Historical transaction, look-back five business days (applied for 1M, 2M, 3M and 6M) applying a market adjustment factor (MAF)



Revised STIBOR calculation methodology Waterfall Methodology

Level 3 Contribution

Required where a Panel Bank's contribution for a STIBOR tenor cannot be calculated automatically using either Level 1 or Level 2.

Level 3 contributions should reflect the Panel Bank's estimated cost of funds for day T (the day preceding the calculation and publication of STIBOR), taking into consideration the Panel Banks short-term wholesale funding strategy.

Metadata is provided daily by the Panel Banks to support any level 3 contribution.



Revised STIBOR calculation methodology Bid to Offer Spread Adjustment (BOS)

A 'Bid to Offer Spread' (BOS) is added, effectively moving the calculated COF rate to that of a 'lending rate'. The application of the BOS is automatically performed by the STIBOR calculation system.

Panel Banks are allowed to alter the default BOS under two circumstances:

- Balance-Sheet Considerations the additional cost related to the adjustment of the bank's balance sheet for key reporting dates, most notably over year-end, e.g., bank tax
- Riksbank Deposit Rate the calculation of an implied SEK rate when funding generated by CP and CD issuance is out of line with the perceived SEK term rate structure determined by the floor created by the Riksbank overnight deposit rate

Tenor	BOS
Tom/Next	8 basis points
1 Week	10 basis points
1 Month	15 basis points
2 Months	15 basis points
3 Months	15 basis points
6 Months	15 basis points



Revised STIBOR calculation methodology Counterparty types

Non-financial corporations (s11)	Other financial intermediaries (S125) (except insurance corporations and pension funds)
General government (S13)	Financial auxiliaries (S126)
Central bank (S121) (excluding monetary policy operations)	Captive financial institutions and money lenders (S127)
Deposit-taking corporations (S122) (except the central bank)	Insurance corporations (S128)
Money Market Funds (MMFs) (S123)	Pension funds (S129)
Non-MMF investment funds (S124)	

European System of Accounts (ESA 2010)



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To reflect the underlying economic reality



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Revised STIBOR calculation methodology Documentation

The revised calculation method and the alignment with market and BMR requirements have given rise to a comprehensive documentation to ensure transparency and compliance with the methodology. Among other things, the following is publicly available.

- STIBOR Calculation Methodology
- STIBOR Post Publication Re-determination Policy
- STIBOR Panel Bank Code of Conduct
- STIBOR Consultation policy
- STIBOR Benchmark Review Policy
- STIBOR Transition Policy
- STIBOR Cessation Policy

SFBF Document Library available on: https://swfbf.se



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