

SOR to SORA: Looking through the transition pain to long term positives

Selena Ling

Head of Research and Strategy

+65 6530 4887

LingSSSelena@ocbc.com

Terence Wu

FX Strategist

+65 6530 4367

TerenceWu@ocbc.com

Background

In view of the impending discontinuation of the USD LIBOR by the UK FCA (see List of Abbreviations at p. 4) in end-2021, the SOR benchmark used by Singapore may be affected. The calculation of the SOR value will become impossible in its existing form as the USD LIBOR is an input variable. In response, the ABS-SFEMC convened a working group to formulate a reaction to this risk. The working group subsequently recommended for the SORA to replace the SOR as the benchmark for SGD interest rate derivatives; and for the SORA to take the place of the SOR as one of the benchmark rates in the cash market (together with the SIBOR/SIBOR+ and other bank deposit / board rates), as part of a multiple rate approach.

In this piece, we analyse the implications of the impending transition from SOR to SORA. Currently, the SORA is an overnight rate, while the SOR is available on the overnight, 1-month, 3-month and 6-month term periods. The lack of actual forward-looking “term-SORA” (a long term target, pending the development of “deep and liquid trading” of SORA derivatives) complicates comparisons for now. We overcome this issue by compounding the daily SORA rates into the 1-month and 3-month horizons, and assume that characteristics of this compounded SORA are comparable to the eventual term-SORA.

Implications: Transition pains unavoidable

In the immediate horizon, the first questions on the end user’s mind are **how the new benchmark interest rate will be calculated for existing SOR-pegged products**, and **how it affects the repayment schedule**. The positive here is that much of such transition issues involving existing products have largely been ironed out by the authorities.

The **Adjusted SOR**, calculated by replacing the USD LIBOR term in the SOR equation with the Adjusted SOFR plus Spread Adjustment, **will replace the SOR as an interim measure**. The other possible pain point is the shift from a forward looking SOR to the backward looking alternatives. Until the term-SORA (and term-SOFR in the US) is launched, the replacement benchmarks will all be backward looking. In simple terms, it means that the replacement interest rates will only be known *after* the interest period through daily compounding, rather than at the start of the interest period. This change will result in slight changes in the repayment schedule. However, industry norms have also been established to address this issue.

Newly launched products from here on, be it in cash market or derivatives, will see fewer transition issues, as they will be strongly encouraged to be

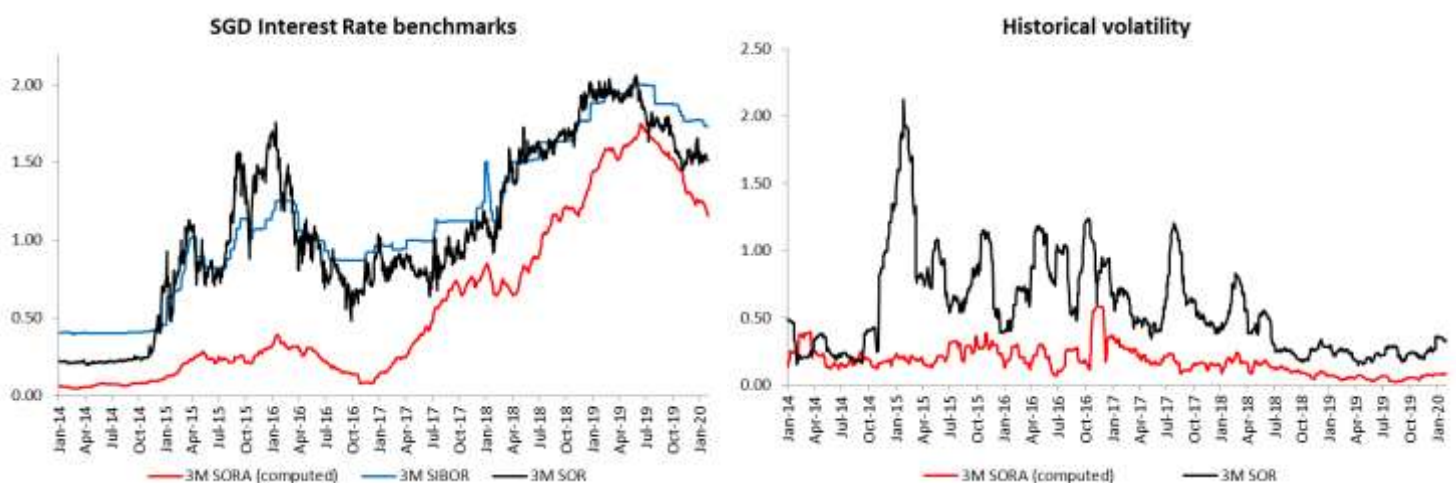
directly SORA-pegged. Adopting SORA at this early stage for the new products avoids the usual transition issues as the deadline approaches.

Implications: Long term positives for the market

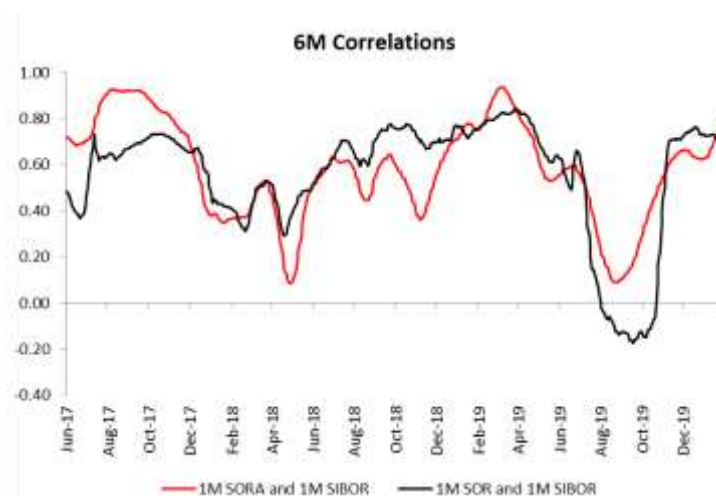
However, the transition pains should not last long. Once the market participants get used to the new benchmark, we identify three positive implications that may potentially arise due to the transition:

1. Better price stability in SGD interest rate derivatives and cash market products due to the lower volatility in compounded SORA, compared to SOR.
2. Higher demand for SGD interest rate derivatives for hedging SIBOR-pegged cash market exposures, due to the stronger correlation between compounded SORA and SIBOR, compared to SOR and SIBOR.
3. More alternatives in the cash market, especially for retail customers, if the transition is smooth and successful.

The SOR is essentially the interest rate paid to borrow the SGD synthetically by borrowing in USD and swapping back to SGD. Apart from the USD LIBOR, it also counts USD-SGD swap rates as an input variable. The outcome of computing SOR from USD LIBOR and swap rates is that SOR is rather volatile. **On a rolling 30-day basis, the historical volatility of compounded SORA is lower than the corresponding SOR by a significant margin.** Therefore, by replacing SOR with compounded SORA, there may be less fluctuation in the price of SGD interest rate derivatives. For cash market products, such as business loans, the variation in monthly interest repayment amounts may also reduce. These improvements lead to fundamentally more stable prices in SGD interest rate derivatives and cash market products.



Apart from price stability, the replacement of the SOR with the SORA may potentially lead to more demand for SGD interest rate derivatives for hedging purposes. The SIBOR is primarily used as a benchmark for loans to non-FI entities. At present, larger entities with SIBOR exposure can hedge that exposure through SOR-based interest rate derivatives. However, the **correlation between compounded SORA and SIBOR has been better than the correlation between SOR and SIBOR in recent history (going back about 30 months)**. Thus, SORA-based interest rate derivatives should theoretically be better suited for hedging purposes, and perhaps drive a higher demand for these derivatives.



Finally, we think the successful transition from SOR to SORA will eventually pave the way for greater choice for the cash market, especially for retail sector. At present, SIBOR is the dominant benchmark for the retail sector, with only a small proportion of retail mortgages pegged to SOR.

The retail client often seeks a balance between price stability and market sensitivity in the benchmark rate that he uses. At present, the preference is for the price stability afforded by SIBOR. The more involved calculation methodology for SOR, and its inherent volatility means that SOR-pegged products are less attractive for the retail segment. Furthermore, SOR turned negative in 2011 and this created some confusion for clients holding SOR-pegged products. That episode highlighted the unsuitability of SOR as a benchmark under certain circumstances.

However, SIBOR-pegged cash products have their own set of problems too. In a falling rate environment, it is not uncommon to hear the complaint from more informed retail clients that SIBOR is not tracking global interest rates lower. Part of this apparent lack of sensitivity is due to SIBOR's derivation methodology. On the other hand, the volatility in SOR may not be easily stomached by most retail clients.

The SORA may be a compromise, allowing more informed retail clients to more easily take a view on interest rate directionality, while retaining

some sense of price stability. Thus, SORA-pegged products may eventually gain more traction than the previous SOR-pegged products, potentially providing a better alternative within the multiple rate approach for SGD cash markets.

Conclusion: Network effect at play

Ultimately, the transition from SOR to SORA appears to be inevitable. Short term transition issues will eventually give way to a strengthened, more diversified market. The more successful the transition in terms of take-up rate, the more the positive implications will accrue. Looking forward, the main gripe may be backward looking nature of the new benchmarks, which may not be intuitive to the end user. Thus, the key to a more widespread adoption may be the establishment of a forward-looking term-SORA – a more like-for-like replacement. This should allow the new benchmark to gain even further traction.

List of Abbreviations

ABS-SFEMC	ABS Benchmarks Administration Co Pte Ltd and the Singapore Foreign Exchange Market Committee
FCA	Financial Conduct Authority
SIBOR	Singapore Interbank Offered Rate
SIBOR+	Enhanced SIBOR
SOR	Singapore Dollar Swap Offer Rate
SORA	Singapore Overnight Rate Average
SOFR	Secured Overnight Financing Rate
USD LIBOR	US Dollar London Interbank Offered Rate

Treasury Research & Strategy

Macro Research

Selena Ling

Head of Research & Strategy
LingSSSelena@ocbc.com

Tommy Xie Dongming

Head of Greater China Research
XieD@ocbc.com

Wellian Wiranto

Malaysia & Indonesia
WellianWiranto@ocbc.com

Terence Wu

FX Strategist
TerenceWu@ocbc.com

Howie Lee

Thailand, Korea & Commodities
HowieLee@ocbc.com

Carie Li

Hong Kong & Macau
carierli@ocbcwh.com

Dick Yu

Hong Kong & Macau
dicksnyu@ocbcwh.com

Credit Research

Andrew Wong

Credit Research Analyst
WongVKAM@ocbc.com

Ezien Hoo

Credit Research Analyst
EzienHoo@ocbc.com

Wong Hong Wei

Credit Research Analyst
WongHongWei@ocbc.com

Seow Zhi Qi

Credit Research Analyst
ZhiQiSeow@ocbc.com

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