OCBC Viewpoint: Negative SOR

OCBC Bank

Negative SOR – OCBC Treasury Research's FAQ

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1. What is the SGD Swap Offer Rate (SOR)?

SOR is an FX-implied rate, calculated from the below formula. As a calculated rate, there is no technical floor to how low SOR can fall to.

USD/SGD Forward Rate = USD/SGD Spot Rate +/- Swap Points

↓ 1.200017

↓ 1.2067

↘ (6m USD SIBOR – 6m SGD SOR) x Day Count Fraction x USD/SGD Spot Rate

↓

Currently,

1) 6m USD Sibor is at 0.45944%
2) Daycount for USD: 184/360 days
3) Daycount for SGD: 184/365 days
4) 6m SGD SOR → to be solved

$$\boxed{1.200017 = 1.2067 \text{ minus } \left\{\left[(0.45944/100) \times (184/360)\right] - \left[(\text{6m SGD SOR}/100) \times (184/365)\right]\right\} \times 1.2067}$$

⇩

Derived 6 month SGD SOR = Negative 0.63274%

2. How can the SOR be negative?

Interest rate parity in a world of free capital flows necessitates that SOR will be dictated by foreign interest rates, given that MAS's monetary policy is for an appreciating SGD NEER stance since Singapore is a small open economy. Hence domestic interest rates are determined largely by market forces, and are a function of market liquidity and FX expectations (e.g. for structural USD weakness) amongst others. In fact, the SGD NEER stance has been tightened for the last three consecutive policy meetings which is unprecedented in MAS history.

In this instance, the US Federal Reserve has pledged to keep its effective zero interest rate policy (ZIRP) until mid-2013, and partly contributed to SOR collapsing to negative implied levels. Otherwise, one can theoretically arbitrage by borrowing in USD, swap into SGD and earn the positive carry through higher SGD SIBOR or deposit rates, or even park in SGD T-bills for example.

The negative SOR is not a direct reflection on domestic economic fundamentals.

The SOR being fixed in negative territory (a historic development) mirrors developments in the CHF. With structural dollar weakness and low US interest rates set against the SGD's appreciation policy after the FOMC, uncovered interest rate parity conditions (as per the above formula) necessitated lower implied SGD interest rates, especially with the USD-SGD spot underpinned by mild risk aversion. Across Asia, non-deliverable forwards (NDFs) have collapsed to the left (with forwards/forwards also easing) i.e. Asian currencies appreciating against the USD, and this may be symptomatic of structural dollar weakness (or, from the money market perspective, the dollar funding squeeze). Only the TWD and SGD are habitually discount currencies but the Singapore case is an even more peculiar case as there is an explicit appreciation policy for the SGD NEER. At this juncture, the situation may be more reflective of acute dollar weakness in the forwards being translated into the SOR fixings, rather than the depressed SOR being a direct consequence of a global economic slowdown. Note that even at the height of Lehman, SORs did not test the zero floor.

3. Why has it only happened recently?

Some cited factors as to why SOR was pushed below the zero level recently:

(a) During heightened financial market volatility, especially in the wake of the US sovereign rating downgrade from AAA to AA and banking system stress in the Euro zone, market preference is to hold, even hoard USD liquidity, similar to what happened post-Lehman crisis.

(b) SGD now ranks among the true blue-chip safe-haven assets like JPY and CHF. Singapore is an AAA-rated country with strong economic fundamentals and a distinct exchange-rate oriented monetary policy, with an appreciation bias to boot. There could be an increasing shift to hold SGD outright amid the ongoing global risk aversion.

(c) Unsubstantiated market rumours that the central bank may not have fully sterilized its FX intervention activity contributes to the excess liquidity situation domestically. But it is highly unlikely that an excessively low interest rate policy is being engineered here to support growth or to re-inflate the economy as central bank independence and credibility is at stake.

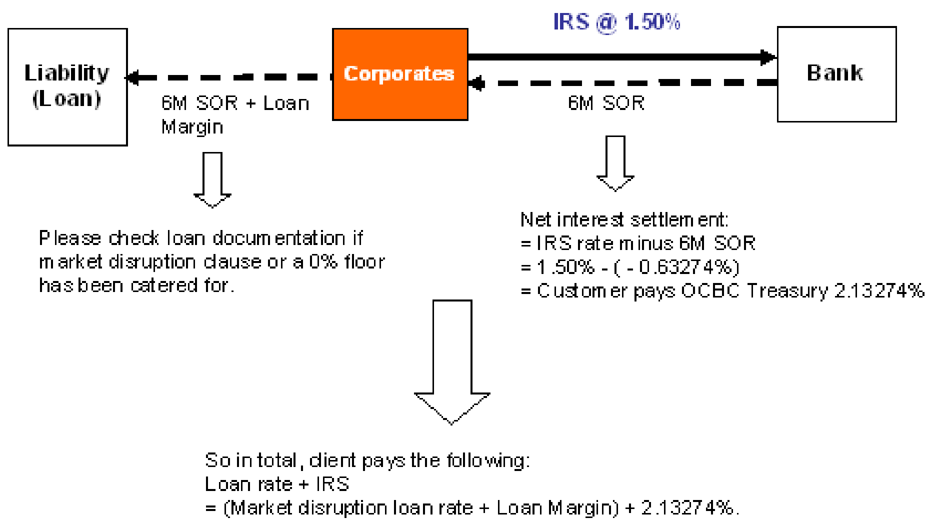
4. Why should we be concerned with negative SOR?

In Singapore, many businesses and/or mortgage loans are pegged to SOR. It is unprecedented in Singapore's history for negative SOR fixings. It poses a conundrum of what banks, borrowers and even depositors should do.

(a) For banks: Singapore banks' loan documents usually have a "market-disruption" clause whereby the bank has a few plausible options –switch to an alternative interest rate mechanism like cost of funds or even SIBOR, or floor at zero (unlikely). For retail banks that do not fund at SOR, but fund using the money market curve, the event of sustained widening gap between SOR and the real cost of funds could theoretically hurt bank margins.

(b) For borrowers: Due to customization of loan agreements, borrowers need to seek clarification with the relevant banks on whether they are invoking the market-disruption clause, and if so, what is the relevant funding rate under such circumstances.

(c) Impact on Corporates who have entered into a pay fixed SGD Interest Rate Swap (IRS) against SOR to hedge their floating rate liability: Corporates enter into a pay fixed SGD interest rate swap to synthetically convert their floating rate liability to a fixed rate liability. Under the IRS, at regular intervals corporates pay fixed interest rate & receive SOR to offset against their underlying floating SOR liability. The 2000 ISDA Definitions and 2006 ISDA Definitions provide for application of "Negative Interest Rate Method". Accordingly, due to the negative SOR, customer will be paying SOR instead of receiving SOR. This means, customer will be paying fixed rate plus SOR if SOR remains negative.



(d) For depositors: the impact would be minimal in that deposit rates are unlikely to track SOR to negative territory. Incidentally, in the US, cash and deposit levels are so abundant that the Bank of New York Mellon has reportedly begun charging depositors for excess deposits, which is reflective of the elevated fear level.

5. Is it possible for loan rates pegged to SOR to also turn negative? Will banks pay their borrowers in an extreme case?

As mentioned above, most loan agreements have the "market disruption" clauses, so it is unrealistic to expect to see negative effective loan rates. The reality is that given the market fears about another banking crisis happening in Europe, the real funding conditions and costs for banks across the world have actually tightened, reflecting some market dislocations.

6. How long can negative SOR persist?

Negative SOR is a market anomaly in Singapore's context. As MAS does target the exchange rate and not the interest rate, this implies that SOR may stay negative for a while in the current dovish/fearful environment. However, this is not to discount that should market liquidity remain unstable and SOR chaotic, there will not be any policy intervention or recommendations by industry bodies (for example, the Association of Banks in Singapore, the Singapore Foreign Exchange Market Committee) to stabilize the situation.

7. Will negative SOR discourage capital inflows into Singapore?

Unless the negative SOR prove exorbitant, it is unlikely to discourage capital inflows into Singapore at this juncture given the overall de-risking environment where investors are worried about a global double-dip scenario.

8. What will this mean for bank loan formulas going forward?

It is conceivable that banks will gradually and incrementally shift away from SOR as a loan pricing mechanism in search of something more stable, possibly SIBOR. This will take time and will likely need some "sanctioned" market consensus to proceed.

9. Under what circumstances will negative SOR correct to positive territory again?

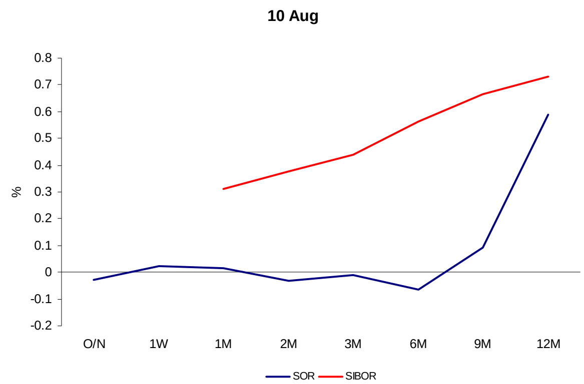
(a) Markets begin to reprice expectations of MAS easing or switching back to neutral SGD NEER stance for the upcoming October monetary policy review, whereby forwards may have potential to correct rightwards while the underlying of implicit SGD appreciation vanishes. This is not our base case right now, but risks may be mounting given a technical recession for the Singapore economy in Q3 2011 may be on the cards.

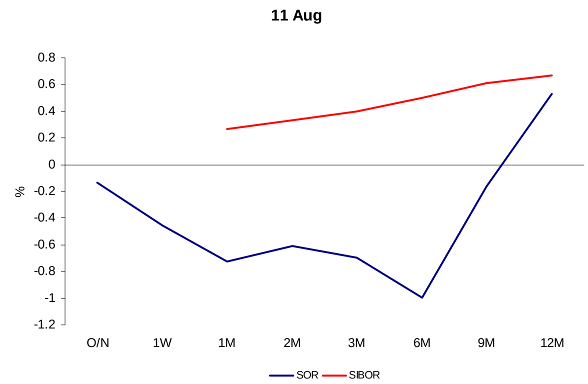
(b) Acute USD weakness abates and the cost of USD funding moderates.

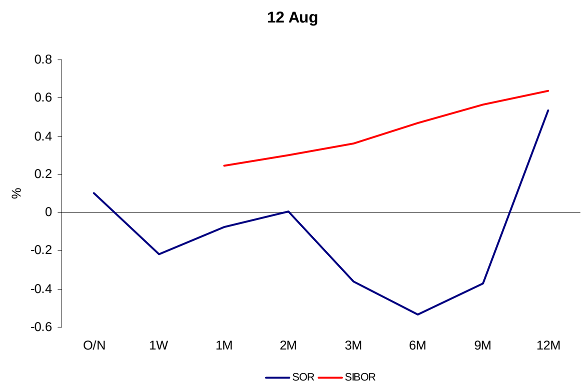
(c) Systemic shock to global markets whereby SGD relinquishes its safe-haven status and spot and implied domestic rates both move higher.

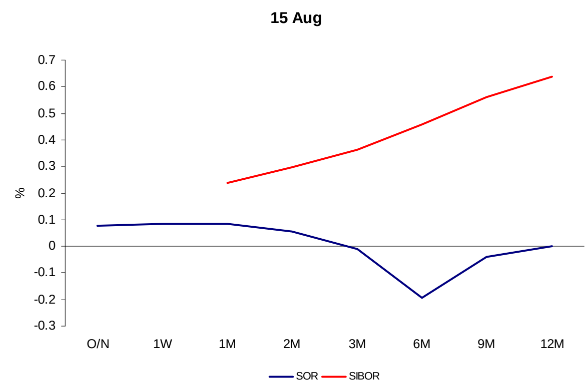
(d) Fed raises interest rates, which is a very low probability prospect at this juncture.

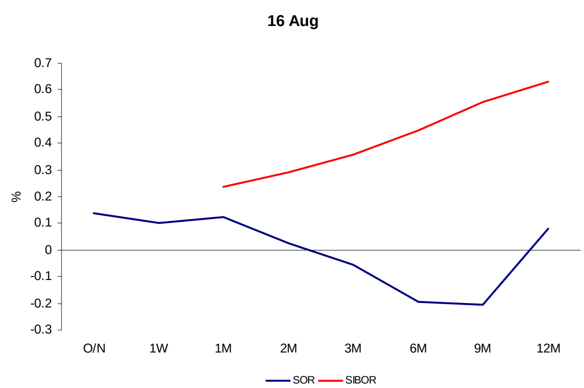
Appendix: ABS 11.30am SOR and SIBOR Fixings

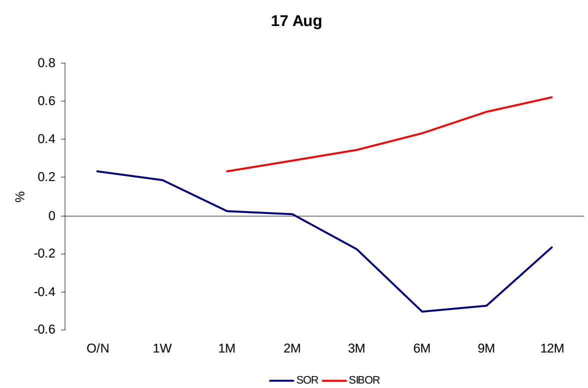












Source: Bloomberg, OCBC

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